GARCIA & MILAS

Attorneys at Law
44 Trumbull Street, New Haven, CT 06510, USA
Phone 203 773 3824 Fax 203 782 2312
www.garciamilas.com

Brian C. Quiros
bquiros@garciamilas.com

October 4, 2018

VIA FIRST CLASS MAIL & EMAIL

United States Environmental Protection Agency
Office of Regional Counsel
Attn: Atty. Michael Knapp
5 Post Office Square
Mail Code: ORC04-6
Boston, MA 02109-3912
Knapp.michael@Epa.gov

Re: Town of New Milford v. Standard Demolition Services, Inc.
Notice of Deposition and *Subpoena Duces Tecum* of Ms. Kimberly Tisa

Dear Attorney Knapp:

This correspondence follows-up on our conversation dated August 21, 2018 regarding the subpoena duces tecum served on Ms. Kimberly Tisa ("Ms. Tisa") for an upcoming deposition. This firm represents Standard Demolition Services, Inc. ("SDS") in a lawsuit filed by the Town of New Milford, Connecticut (the "Town") in Connecticut Superior Court, the Judicial District of Litchfield. Ms. Tisa's deposition testimony is in the best interests of the U.S. Environmental Protection Agency ("EPA").

In our August 21, 2018 conversation and in subsequent communications, you represented that Ms. Tisa's deposition appearance and compliance with the accompanying subpoena duces tecum are governed by EPA regulations 40 C.F.R. § 2.401 *et seq* (sometimes referred to as the *Touhy* regulations). In compliance with EPA's *Touhy* regulations, and to apprise EPA of the necessity of Ms. Tisa's deposition testimony in considering whether to make her available to be deposed, we present the following information.

The litigation stems from the demolition of a 320,000 square foot building which was contaminated with PCBs, asbestos, and lead based paint known as the "Century Enterprise Center," or "Century Brass," or "Century Enterprise" located in New Milford, Connecticut. Demolition of the Century Enterprise Center was Phase III of the Town's redevelopment effort.

In furtherance of that effort, the evidence indicates the Town retained Tighe & Bond as a consultant in 2014 for the redevelopment's Phase II and retained TRC Environmental Corp. ("TRC") as a consultant in 2015 for the instant Phase III. In September of 2014, Mr. James T. Olsen at Tighe & Bond drafted an "Interim Remedial Action Report" for the Century Enterprise Center. (Attached as **Exhibit 1**). In the "Interim Remedial Action Report," Tighe & Bond characterized the painted structural steel as non-porous and represented the building columns had been decontaminated. (See §§ 3.4.2 on pg. 3-5, 5.4.3 on pg. 5-7). TRC drafted and prepared the "Modified Self-Implementing Phase III PCB Remediation Plan" in January of 2015 for EPA's approval (the "Modified SIP"). (Attached as **Exhibit 2**). There was no mention in the Modified SIP that SDS had to remediate or dispose of the structural steel due to the presence of PCBs in the paint on the structural steel.

The evidence shows that Ms. Tisa had extensive communications with Mr. Mike Zarba ("Mr. Zarba") the Public Works Director for the Town, after submission of the Modified SIP regarding approval of same. (Attached hereto as **Exhibit 3**). Ms. Tisa and Mr. Zarba communicated on April 2, April 17, May 22, July 13, July 14, and July 31, 2015. (Id). Finally, EPA issued an approval letter to the Town on September 1, 2015 for the Town to proceed with PCB cleanup and disposal pursuant to 40 C.F.R. §§ 761.61(a) and (c). (Id). Of particular concern are the following:

- Ms. Tisa's questions from July 14, 2015; specifically, questions # 6 & 9 related to the contamination of the cranes and steel beams.
- Attachment 1 of the September 1, 2015 approval letter:
  - General Condition # 1 states the approval applies only to *PCB remediation waste*. So the approval does not apply to PCB bulk product waste?
  - General Condition #13 provides that the steel beams were considered 'non-porous.' Why were the painted steel beams considered 'non-porous'? (See definition of "non-porous" at 40 C.F.R. § 761.3).
  - General Condition # 13.a.(ii) provides the "steel beams shall be disposed of as ≥ 50 ppm PCB waste or alternatively shall be sampled to determine PCB disposal requirements." What was EPA's intention regarding this condition?
- Additional correspondence took place between Mr. Zarba and Ms. Tisa on August 31, 2016, wherein Ms. Tisa inquired about the presence of paint on the steel beams. (Attached as **Exhibit 4**). In response, on September 9, 2016, Mr. Zarba represented the painted structural steel was to be handled as non-porous and had been previously decontaminated. (Attached as **Exhibit 5**). Finally, on September 12, 2016, Ms. Tisa stated "please be aware that EPA's approvals did not specifically address the paint. Further, no specific information pertaining to PCBs and paint was discussed in any of the documents reviewed." (Attached as **Exhibit 6**). Ms. Tisa's September 12, 2016 comment is particularly interesting because it implies that i) she was not made aware of the fact that the steel was painted, ii) she was not made aware that the paint was contaminated with PCBs, and iii) the September 1, 2015 approval does not apply to the painted steel.

I. Allowing Ms. Tisa to Testify is Clearly in the Interest of the EPA.

EPA will make an employee available to testify if such testimony is "clearly in the interests of EPA." (See 40 C.F.R. § 2.401(c)). In prosecuting its case and defending itself against SDS's counterclaim, the Town has taken the following positions:

- EPA is responsible because it failed to correct any prior mis-characterizations of the structural steel (Attached as **Exhibit 7**, the March 15, 2018 deposition transcript of Mr. Mike Zarba, 57:17-59:25),
- the Town is not responsible to sample or test painted surfaces for PCBs because EPA *never* requires volumetric (paint-chip) sampling of paint on structural steel (Attached as **Exhibit 8**, expert disclosures of Mr. Richard McManus, Mr. Edward Doubleday, Mr. Erik Plimpton),
- EPA regulations do not require a building owner to sample any building materials for PCB bulk product prior to demolishing a building (See expert disclosure of Mr. Richard Gille, Mr. Greg Kaczynski, attached as Exhibit 8),
- EPA regulations do not specify which building materials must be tested by an owner prior to demolishing a building,
- EPA did not require the Town to submit results of any paint-chip sampling of the structural steel,
- EPA regulations give building owners discretion as to which building materials to test for PCB bulk product and permit owners to assume PCBs are not present unless caulks and window glazings are present, and
- EPA did not require the Town to submit sampling results of the asbestos contaminated roofing material.

The evidence indicates that the Town represented the steel was clean (when it was actually all PCB contaminated and in part contaminated > 50 ppm), intended to recycle the steel, refused to test the paint and dust on the steel to ascertain whether it was PCB contaminated, actively sought to prevent testing when requested by SDS, terminated SDS to further prevent the testing, went to court to prevent testing as part of the instant litigation, intended to dispose of the contaminated steel by shipping it to Turkey, and assumed that EPA approved or would not object to such misbehavior, misrepresentations and misinterpretation of EPA's rules and regulations.

The most explicit examples of the Town applying EPA's imprimatur for its conduct, are the Town's Second Requests for Admission (attached hereto as **Exhibit 9**[1]) which represent Ms. Tisa knew, understood, or had information that there were PCBs in the paint on the overhead cranes (Requests ## 11-12), Ms. Tisa knew about PCB

[1] Due to the Town's failure to provide copies of the referenced exhibits to its Second Requests for Admission, SDS cannot provide them to EPA. However, copies of documents SDS believes are Exhibits A-N to the Second Requests for Admission are attached herein as Exhibit 3.

contaminated dust on the structural steel, Ms. Tisa knew the PCB contaminated dust may contaminate the structural steel, Ms. Tisa had information indicating the PCB contaminated dust may contaminate the structural steel (Requests ## 17-18), Ms. Tisa knew the painted structural steel had been previously characterized as "non-porous" (Requests ## 17-20), and that Ms. Tisa required and insisted upon wipe sampling *only* to determine PCB contamination of the painted structural steel (Requests ## 36-40[2]).

The Town has contended that SDS should have only wipe-sampled the painted steel, and then brought the steel to a salvage operator. The Town – and TRC – is also contending that in projects similar to Century Brass in which EPA approved decontamination & wipe sampling procedures on the steel, recyclers would accept the structural steel for recycling. Essentially, that no further testing is required. Furthermore, Mr. Plimpton is expected to testify that EPA regulations do not require building owners to sample or test painted surfaces for bulk product in buildings to be demolished.

Permitting Ms. Tisa to testify is in the interest of EPA because the Town is not only publicly representing that EPA approves of such misconduct but also because EPA cannot establish the precedent that contaminated items are not tested and improperly recycled, especially in light of the fact that Ms. Tisa represented on September 12, 2016 that "EPA's approvals did not specifically address the paint" (Exhibit 6), which was a response to Mr. Zarba's September 9, 2016 representation that the Town had previously remediated the structural steel (Exhibit 5). Ms. Tisa's testimony will clarify for the Town, TRC, SDS, and others, how EPA's rules and regulations are properly applied. Otherwise, the implication is that EPA condones when entities actively misrepresent the facts before it or obfuscate the truth.

II. Ms. Tisa is an Integral and Critical Witness.

Stated simply, Ms. Tisa is very familiar with the facts of this site, she has visited the site no less than two (2) times and is in the unique position to provide testimony related to what she knew, when she knew it, and the basis of that knowledge. The Town has represented Ms. Tisa knew the steel was painted. To be clear, SDS is not seeking Ms. Tisa's testimony as an expert witness, but rather as a fact witness. Ms. Tisa should be able to provide insight and clarity regarding what she knew and how she intended the Town to address abatement and disposal of PCB contamination that she may/may not have known about, if the structural steel was painted how she wanted the Town to proceed, and did the paint itself have to be tested before the structural steel was taken offsite and disposed of or recycled. For example, only Ms. Tisa is able to provide necessary testimony as to whether she was unaware the structural steel was contaminated with PCB contaminated paint, and thus is not a source of contamination addressed by the September 1, 2015 approval letter.

---

[2] SDS has attached a copy of the document that it believes is "Exhibit U" referenced in written request ##36-40.

III. The Deposition of Ms. Tisa will not Impose an Undue Burden on the EPA.

In addition to confirming that allowing an employee to testify is in the interest of EPA, 40 C.F.R. § 2.401(c) also seeks to safeguard that private litigants do not use EPA employees as expert witnesses, and to ensure that the employee's official time is used for official purposes.

To reiterate, SDS is not seeking to depose Ms. Tisa to have her provide expert testimony. SDS rather seeks Ms. Tisa's factual knowledge of events in which Ms. Tisa participated. Ms. Tisa has personal knowledge of many events relevant to this case including her meetings, communications, and conversations with the Town and her understanding of EPA approvals and regulatory requirements which do/do not apply to the facts in this case, as well as her ability to objectively answer questions regarding the regulatory approval process.

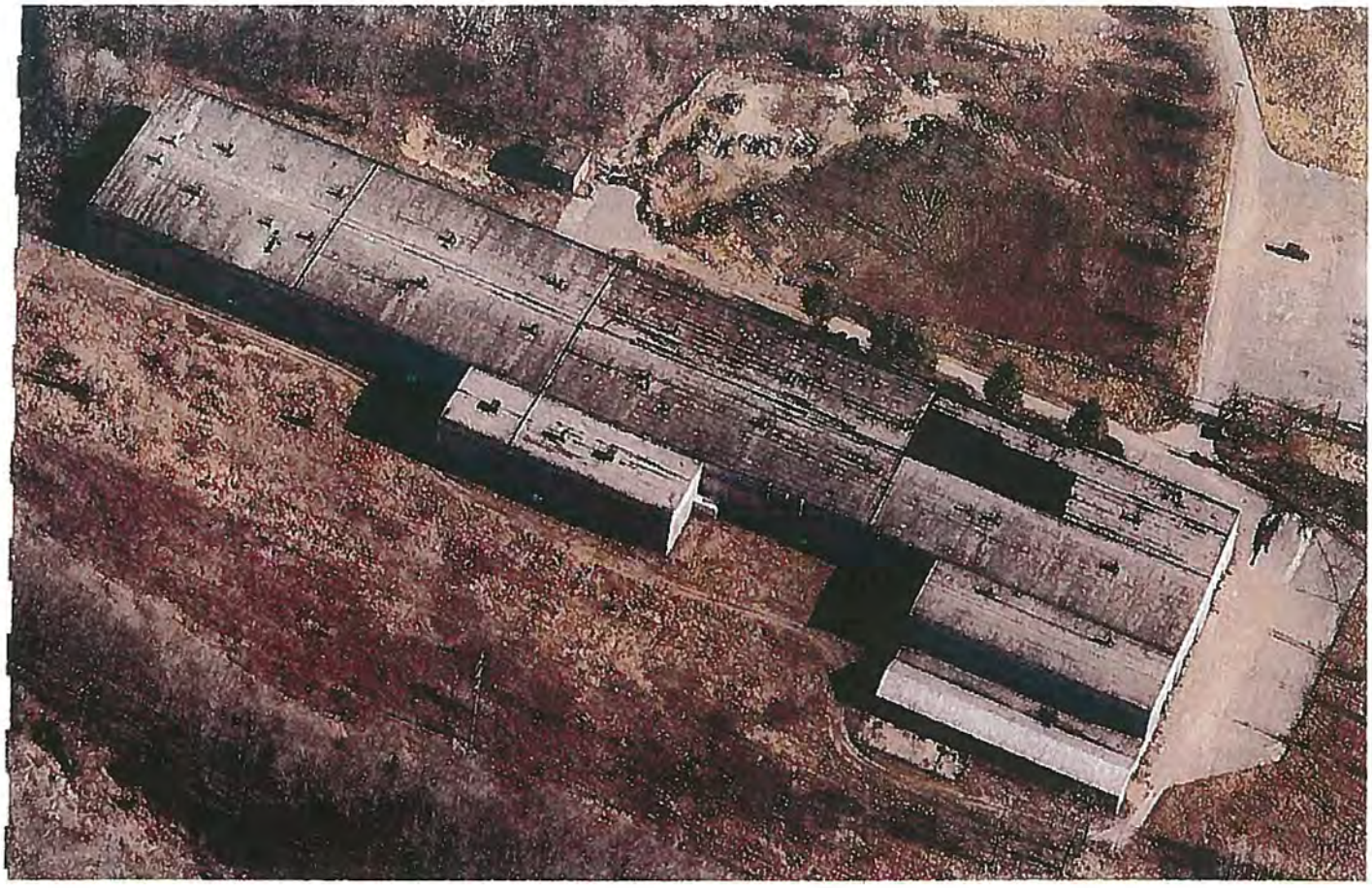
SDS is willing to depose Ms. Tisa at the most convenient time and place possible for her, in coordination with counsel for the Town, to minimize any potential distraction or delay in her schedule.

Sincerely,

Brian C. Quiros

BCQ/ll
Encls.

EXHIBIT 1



Tighe&Bond

Century Enterprise Center
Aspetuck Road
New Milford, CT

Interim Remedial Action Report

EPA ID No. CTD000847707
CTDEEP Remediation ID No. 2406

Prepared For:

Town of New Milford

September 2014

12-6011
October 28, 2014

David Ringquist
Supervising Environmental Analyst
Remediation Division
CT Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106

Re: **Interim Remedial Action Report**
Former Century Brass Products
Aspetuck Road
New Milford, CT
EPA ID No. CTD000847707
CTDEEP Remediation ID No. 2406

Dear Mr. Ringquist:

On behalf of the Town of New Milford, enclosed is an Interim Remedial Action Report for the Former Century Brass Products facility.

If you have any questions, please contact Mike Zarba of the Town of New Milford at (860) 355-6040.

Regards,

TIGHE & BOND, INC.

James T. Olsen, LEP
Vice President

cc: Michael Zarba – Town of New Milford
Joe Ferrari - EPA
Kim Tisa – EPA
Gary Trombly – CTDEEP
Aaron Gilbert - EPA

Cover Letter

Section 1 Introduction

Section 2 Site Description & Environmental Setting

2.1 Site Location & Description 2-1
2.2 Site Background 2-1
2.2.1 Areas of Concern 2-2
2.3 Geology & Surficial Materials 2-10
2.4 Groundwater & Surface Water Classifications 2-10

Section 3 Remedial Activities Summary

3.1 Petroleum Impact Remediation 3-1
3.1.1 AOC-1: 1,000-gallon UST Closure 3-1
3.1.2 AOC-3: (2) 30,000-gallon UST Closure, Transfer Vault, Piping ... 3-1
3.1.3 Manifested Waste 3-2
3.2 Hazardous Substance Remediation 3-2
3.2.1 AOC 5: Equalization Lagoon, Clariflocculator, & Acid Lines 3-2
3.2.2 AOC 6: Northwest Sludge Disposal Area 3-3
3.2.3 AOC 8: Former Dip Tank Area 3-3
3.2.4 AOC 13: Northeast Area of Stressed Vegetation 3-3
3.2.5 Manifested Waste 3-3
3.3 Phase I PCB Source Removal 3-3
3.3.1 AOC 7: Interior Transformer Release Areas 3-4
3.3.2 AOC 10: Boiler Room 3-4
3.3.3 Manifested Waste 3-4
3.4 Phase II PCB Remediation 3-5
3.4.1 AOC 7: Entryways (Related to Transformer Release Areas) 3-5
3.4.2 Decontamination and Removal of Non-Porous Materials 3-5
3.4.4 Manifested Waste 3-6
3.5 Asbestos Abatement 3-6
3.5.1 Manifested Waste 3-7

Section 4 Regulatory Programs

4.1 Federal Regulatory Programs 4-1
4.1.1 Federal Regulatory Resource, Conservation and Recovery Act 4-1
4.1.2 Toxic Substance Control Act 4-2
4.1.3 Comprehensive Environmental Response, Compensation and Liability Act 4-3
4.2 State Regulatory Programs 4-3
4.2.1 Underground Storage Tank Program 4-3

4.2.2 Asbestos Abatement Program 4-3
4.2.3 Property Transfer Program 4-3
4.2.4 Voluntary Remediation Program 4-4
4.2.5 Hazardous Waste Program 4-5
4.3 State Soil Remediation Criteria 4-5
4.3.1 Direct Exposure Criteria 4-6
4.3.2 Pollutant Mobility Criteria 4-6

Section 5 Remedial Activity Results

5.1 Petroleum Impact Remediation 5-1
5.1.1 AOC-1: 1,000-gallon UST Closure 5-1
5.1.2 AOC-3: Transfer Vault, Piping, (2) 30,000-gallon UST Closure ... 5-1
5.2 Hazardous Substance Remediation 5-2
5.2.1 AOC 5: Lagoon Piping Trenches & Acid Line Removal 5-2
5.2.2 AOC 6: Northwest Sludge Disposal Area 5-3
5.2.3 AOC 8: Dip Tank Post-Excavation Sampling 5-3
5.2.4 AOC 13: Northeast Area of Stressed Vegetation 5-4
5.3 Phase I PCB Remediation 5-4
5.3.1 AOC 7: Interior Transformer Release Areas 5-4
5.3.2 AOC 10: Boiler Room 5-5
5.4 Phase II PCB Remediation 5-6
5.4.1 AOC 7: Entryways (Related to Transformer Release Areas) 5-6
5.4.2 Demolition of the WWTP and Remediation of the Underlying Soils 5-7
5.4.3 Decontamination of Non-Porous Materials 5-7

Section 6 Summary

6.1 Summary 6-1
6.2 Petroleum Impact Remediation 6-1
6.3 Hazardous Substance Remediation 6-2
6.4 Phase I PCB Source Removal 6-2
6.5 Phase II PCB Remediation 6-2
6.6 Remaining AOCs and Recognized Environmental Conditions (RECs) 6-3

Appendices

Appendix A Figures

Figure 1	Site Location Map
Figure 2	Site Plan with Areas of Concern
Figure 3-1	AOC 1 Former Gasoline UST
Figure 3-2	AOC 3 Former 30,000-gallon No. 6 USTs
Figure 4-1	AOC 4: Former Wastewater Treatment Plant
Figure 4-2	AOCs 4 & 5: Former Lagoon and Clarifier
Figure 4-3	AOC 6: Former Northwest Sludge Area
Figure 4-4	AOC 8: Former Dip Tank Area
Figure 4-5	AOC 13: Former Northeast Sludge Area
Figure 5-1	AOC 7: Former Transformer Area 1
Figure 5-2	AOC 7: Former Transformer Area 2
Figure 5-3	AOC 7: Former Transformer Area 3
Figure 5-4	AOC 7: Former Transformer Area 4/4a
Figure 5-5	AOC 7: B4 Excavation Area
Figure 5-6	AOC 7: B19 Excavation Area
Figure 6-1	Excavation Area #1
Figure 6-2	Excavation Area #2
Figure 6-3	Excavation Area #3
Figure 6-4	Excavation Area #4
Figure 6-5	Crane Sample Locations

Appendix B Tables

Table 1	Areas of Concern
Table 2	Waste Manifest Summary
Table 3-1	AOC 1 Post-excavation Results
Table 3-2	AOC 3 Post-excavation Results
Table 4-1	AOC 4 Post-excavation Results
Table 4-2	AOCs 4 & 5: Post-excavation Results
Table 4-3	AOC 6 Post-excavation Results
Table 4-4	AOC 8 Post-excavation Results
Table 4-5	AOC 13 Post-excavation Results
Table 5-1	Transformer 1 Post-excavation Results
Table 5-2	Transformer 2 Post-excavation Results
Table 5-3	Transformer 3 Post-excavation Results
Table 5-4	Transformer 4/4A Post-excavation Results
Table 5-5	B4 Excavation Post-excavation Results
Table 5-6	B19 Excavation Post-excavation Results
Table 6-1	Excavation Area #1 Post-excavation Results
Table 6-2	Excavation Area #2 Post-excavation Results
Table 6-3	Excavation Area #3 Post-excavation Results
Table 6-4	Excavation Area #4 Post-excavation Results
Table 6-5	Crane Wipe Sample Results

Appendix C Site Photographs

Appendix D Phase II Asbestos Documentation

Appendix E Laboratory Data

Section 1
Introduction

Tighe & Bond has prepared this Interim Remedial Action Report (IRAR) for the Century Enterprise Center (CEC), in New Milford, Connecticut (the site). Refer to Figure 1 (Appendix A) for the topographical location of the site.

The purpose of this IRAR is to summarize the remedial activities conducted at the site between 2004 and 2009. The IRAR is also generated to support future applications for Environmental Protection Agency (EPA) Brownfields funding and to facilitate the redevelopment of the Brownfield site. A final RAR will be prepared once the site is completely remediated and verified by a Licensed Environmental Professional (LEP).

The work summarized in this report describes four phases of remediation outlined in the following documents:

1. **Remediation of Petroleum Impacts**
   Remediation of Petroleum Impacts Specifications, December 2003

2. **Remediation of Hazardous Substances**
   Quality Assurance Project Plan, March 2003
   Remediation of Hazardous Substances Specifications, December 2003
   Engineering Evaluation / Cost Analysis (Building Exterior), June 2004

3. **Phase I PCB Source Removal**
   Engineering Evaluation / Cost Analysis (Building Interior), October 2004
   Phase I PCB Source Removal Plan, December 2004
   PCB Disposal Approval Letter, March 16, 2005

4. **Phase II PCB Remediation**
   Engineering Evaluation / Cost Analysis (Building Interior), October 2004
   Phase II PCB Remediation Plan, December 2006
   PCB Cleanup and Disposal Approval Letter, January 24, 2007
   Modification to March 16, 2005 Phase I PCB Disposal Approval, February 2007

The regulatory status of the site is complex, as environmental closure must satisfy requirements for various regulations under both State and Federal programs. At the federal level, the regulatory programs include the Resource Conservation and Recovery Act (RCRA), the Toxic Substances Control Act (TSCA) and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). At the state level, the regulatory programs include the Underground Storage Tank (UST) Program, Property Transfer Program, Voluntary Remediation Program, PCB Remediation, and Hazardous Waste Regulation and Interior Asbestos Abatement.

Section 2
Site Description & Environmental Setting

The Town of New Milford, Connecticut (the Town) ultimately intends to redevelop the Site by remediating the soils and returning the Site to productive use.

2.1 Site Location & Description

The CEC site is located along Aspetuck Road in New Milford, Connecticut (Figure 1). The Site is accessed using Scovill Street off of Aspetuck Road and was formerly addressed as 12 Scovill Street. The property consists of approximately 72-acres, bordered on the north by the West Aspetuck River, south by Housatonic Avenue (a.k.a. Boardman Road), east by Aspetuck Ridge Road and several residential properties, and west by two residential properties along Sostak Road and undeveloped hillside.

Historically, the CEC has been referred to by other names, including the "Century Brass Facility", "Century Brass Tube Mill" or "Davko Site".

The neighborhood is a mixed residential/industrial-zoned area (Zones R40 & I) of New Milford. According to the Town of New Milford Tax Assessor's files, the site is identified on Map 34/Blocks 40 and 41, and Map 35/Blocks 2, 4 and 5. The current owner of the property is the Town of New Milford.

Topography at the site is relatively flat, at elevations between 220 and 230-feet above mean sea level. Along the western property line is a steep hillside, and along the northern and eastern property lines are relatively steep embankments along the West Aspetuck River.

The site is bisected by an east-west oriented topographic drainage divide. Surface water run-off to the north of the divide flows to the West Aspetuck River. To the south of the divide, it flows to the Housatonic River.

2.2 Site Background

Prior to 1957, the Site was used primarily as agricultural land. Beginning in 1957, the Site was developed as a manufacturing facility that included landscaped areas, remnant vacant land, asphalt paved parking areas, a guard house, a pumping station, a former wastewater treatment plant (WWTP) and clarifier, a former equalization lagoon, former metal hydroxide sludge lagoons, and a three-story, 316,130-square foot (SF) manufacturing building, the Tube Mill.

The buildings and other on-site improvements were constructed by the Scovill Manufacturing Company in 1957. Scovill Manufacturing then used the facility to manufacture copper and brass alloy tubing from 1957 to 1976. The facility was later operated by Century Brass Products, Inc., from 1976 to 1985. In 1985, the New Milford Century Brass Products facility filed for Chapter 11 bankruptcy and was forced to terminate plant operations. From 1985 to 1988, operations were limited to plant shutdown procedures. From 1988 to 1999, the facility was owned and used by Davko, Inc. (Davko), as a storage warehouse for boats and pre-manufactured goods. Since 1999, the facility has remained abandoned.

The Tube Mill building is constructed of brick, concrete block, aluminum siding and concrete plank and membrane roof system, atop a concrete slab foundation. The building is approximately three stories in height (40-feet) and covers approximately

320,000 SF. The Tube Mill building is separated into several distinct areas including a former manufacturing area (approximately 300,000 SF), general office space, laboratory, locker room, machine shop, electrical room, and boiler room. There were five large transformers which were located in the interior of the facility and were remediated during Phase I PCB Source Removal activities.

Access to the site is controlled by a gate at the entrance to Scovill Street. In addition, access to the building is restricted to one door due to environmental and safety risks posed by the deteriorating condition of the building.

All equipment used for former copper and brass manufacturing activities has been removed from the building. The former office area was used to store household items as the former owner, Davko, rented space to individuals for storage of various goods. Miscellaneous, minor amounts of machining equipment and a large self-propelled crane were present within the former manufacturing area but were removed during the Phase I and Phase II polychlorinated biphenyl (PCB) clean-up. Various boats, automobiles and trailers, most of which were in poor condition, were present outside on the property surrounding the building and subsequently removed during the Phase I and Phase II PCB remediation.

The manufacturing area had a number of former sub-slab pits and trenches. The former pits and trenches included four former pickling pits with associated trenches. The pits and trenches correspond to the historic plan locations of draw-benches and furnaces. The pits and trenches were likely the foundations for this former equipment. The shallow pits and trenches were filled with sand flush with the finished floor elevation. Reportedly, the pits were cleaned prior to being filled with sand in 1988.

2.2.1 Areas of Concern

Based on the previous investigations, regulatory review and site history, 23 Areas of Concern (AOCs) have been identified at the site. The AOCs are listed in Table 1.

The locations of the AOCs are depicted in Figure 2. Detailed descriptions of the AOCs, as derived from the RCRA Facility Investigation Report (RFI) dated July 2003, are provided below:

AOC-1 - 1,000-gallon Gasoline Underground Storage Tank (UST)

According to a Connecticut Department of Energy and Environmental Protection (CTDEEP) Underground Storage Facility Notification dated March 1988 and an Underground Petroleum Storage Facilities Questionnaire dated October 1988, one steel 1,000-gallon gasoline UST was located at the site, as shown on Figure 3-1. According to the notification, this tank was installed in April 1957 and that the tank was abandoned in place in February 1988. GZA Environmental Site Assessment dated December 1988, stated that the tank was removed from the site in December 1987 or January 1988 by DJP Associates, Ltd. of Waterbury, Connecticut. During the Marin Phase I Environmental Site Assessment (ESA), an area containing the gasoline UST was inspected. Evidence of removal was not observed. During the inspection, the tank access hole, fill and vent pipes, and gasoline pump were observed. The tank contents were inspected for the presence of remaining product. Approximately 804-gallons of water were observed within the UST. When the tank was removed in 2004, it was observed to be entirely filled with cement.

During the Marin Phase III ESA, three soil samples were collected from the perimeter of the tank. No signs of contamination were visually observed in the field or detected in the soil samples.

The UST and surrounding soil was remediated during the petroleum impacts phase of investigation in 2004.

AOC-2 - Regulated Former Sludge Lagoons

The former sludge lagoons (Figure 2) have gone through closure by a CTDEEP-approved closure plan. Based on the sample results obtained during closure activities, the contaminants of concern were metals including copper, nickel and zinc. VOCs were not a constituent of concern with the sludge. Reportedly, all sludge and impacted soils have been removed. Representative post-remediation confirmatory samples indicate achievement of the closure criteria (GZA, 2001). The area was re-graded for installation of the final cap by the Town of New Milford under consultation with CTDEEP.

No soil or groundwater samples were collected from the former regulated sludge lagoon for the Marin Phase III ESA. Post-closure groundwater monitoring was initiated in January 2003 and conducted on a quarterly basis. Metals found to exceed regulatory criteria were aluminum, iron and manganese. It is assumed that the levels are not attributed to the former lagoons but reflect natural background concentrations. The sludge lagoons were closed, as stated in the GZA GeoEnvironmental, Inc. (GZA) May 2001 Closure Activities Report.

AOC-3 - Two 30,000-gallon No. 6 Heating Oil USTs

According to a CTDEEP Underground Storage Facility Notification dated March 1988, two steel 30,000-gallon No. 6 heating oil USTs were located at the Site, Figure 3-2. These tanks were installed in 1957. During the Marin Phase I site inspection, an area containing the two No. 6 heating oil USTs was observed adjacent to the east of the Tube Mill building. Fill pipes for the tanks were observed within a steel containment. Staining, including free product, was observed adjacent to the fill pipes within the steel containment. Vent pipes were observed near the eastern section of the Tube Mill building. In addition, Marin inspected the tanks for the presence of product. An estimated 14,000-gallons of No. 6 fuel oil was present within the southern UST. Approximately 660-gallons of No. 6 fuel oil and approximately 1,400-gallons of water were present within the northern UST.

During the Phase III ESA several soil samples were collected around the USTs and fill pipe. Contamination (petroleum hydrocarbons) was detected at one boring adjacent to the fill pipe at a depth of approximately 14 feet. The horizontal extent of contamination appeared to be limited. The contamination was consistent with No. 6 fuel oil.

The two 30,000-gallon USTs and impacted soil were remediated during the petroleum impacts phase in 2004.

AOC-4 - Wastewater Treatment Plant and Clarifier

The former Wastewater Treatment Plant (WWTP) and clarifier were located adjacent to the east side of the Tube Mill building, as shown on Figure 4-1. From approximately 1957 to 1985, the on-site WWTP treated acid rinsate water generated from manufacturing processes. The WWTP system included a lined equalization lagoon (AOC 5), a clarifier tank, a treatment building containing plant controls, two neutralization tanks, and raw material storage tanks.

Prior to treatment, rinse waters and acid solutions were contained within the equalization lagoon. From the lagoon, the water was then pumped to the treatment plant and then to the clarifier where heavy metal constituents were precipitated out of the solution by the addition of a flocculent. The clarified liquid was then discharged to

the Housatonic River under a National Pollutant Discharge Elimination System (NPDES) Permit. Metal hydroxide sludge settled to the bottom of the clarifier and was then piped to the two on-site regulated metal hydroxide sludge lagoons.

Reportedly, the WWTP system was decontaminated during the former lagoon closure activities. Four floor drains were observed within the treatment plant. The floor drains likely discharged to the facility's storm water drainage system, which discharged to the Housatonic River.

According to a Facility Plan of the Scovill Manufacturing Company entitled *Outside Piping, East Side of Mill*, dated July 1958; one dichromate aboveground storage tank (AST) was formerly located adjacent to the southeast of the WWTP and to the east of the Tube Mill building. The tank was not present during the Marin Phase III ESA. No evidence of staining or past releases was observed in this area.

During the Marin Phase III ESA, several borings were advanced in the exterior areas. No impact was observed in those borings. Borings could not be advanced inside the WWTP to evaluate subsurface soils during the Phase III ESA.

The WWTP was demolished during the Phase II PCB Remediation Phase in 2008/2009. Impacted soils in and around the WWTP were removed and post-excavation confirmatory samples were collected.

AOC-5 - Equalization Lagoon

An equalization lagoon was located to the north of the WWTP and clarifier (Figure 4-2). Prior to treatment, rinse waters and acid solutions were contained within the equalization lagoon. The equalization lagoon had a plastic liner to contain the liquids. The plastic liner replaced a historic liner in 1984, shortly before manufacturing operations ceased.

Several subsurface soil samples were collected from the perimeter of the equalization lagoon. No contamination was detected in the samples. No samples were collected from beneath the liner.

Monitoring wells are located immediately downgradient of the equalization lagoon. Based on sporadic sampling at the wells, no impacts have been detected in groundwater at those wells.

The liner was removed during the Hazardous Substances remedial phase. Soil samples were collected upon removal, and hotspot remediation was conducted to eliminate any releases associated with the lagoon. The lagoon area was back-filled and compacted to grade.

AOC-6 - Northwest Sludge Disposal Area

An area reportedly used to dispose of metal hydroxide sludge was located adjacent to the northwestern corner of the property (Figure 4-3). This area consisted of hummocky topography and dense vegetation. The area also contained several empty, partially buried, 55-gallon drums. According to a GZA report titled *Preliminary Investigation of Prior Sludge Disposal Area, Former CBP Tube Mill Site* dated September 1988, four test pit excavations were performed in the area with the sludge. GZA concluded that metal hydroxide sludge was buried in an area approximately 250 feet northwest of the Tube Mill building.

In the report, it was stated that approximately 200 cubic yards of sludge was buried in this area, which was consistent with information provided by former Scovill Manufacturing Company/Century Brass Products employees.

A dirt path was present leading from the open area west of the Tube Mill building to the western section of the study site. This dirt path, which reportedly was used for right-of-way access, abuts the sludge disposal area to the west. A small amount of green, sludge-like material was observed on this dirt path.

Previous sampling of the sludge indicated elevated mass and leachable metals and VOCs.

As part of the Hazardous Substances remediation phase, the former northwest sludge disposal area was excavated, with confirmatory samples collected from the excavation extents. The area was then back-filled and compacted to grade.

AOC-7 - Interior Transformer Release Area

Currently, no transformers are present at the site. Four areas that formerly housed transformers containing PCB oils were observed in the main manufacturing area of the building, as evidenced by the presence of electrical conduits. These transformers were labeled as PCB-containing transformers. Heavy staining was observed in the vicinity of the former transformer locations.

A former transformer room was located on the eastern section of the Tube Mill building. Historic documentation stated that this room held two transformers containing PCB-oil located at the central and eastern sections of the room. These transformers have been removed from the Site. Minimal staining was observed throughout the concrete floor in the vicinity of the former transformer area.

According to a CTDEEP Spill Report dated May 7, 1999, approximately five gallons of dielectric fluid (PCB-containing oil) was discharged at the site from transformers located within the site building.

Accompanying the spill report, was an inspector's report and analytical results from samples collected from the five on-site transformers and other AOCs within the site building. According to laboratory analytical results, the compositional percentage of PCBs contained in the transformer fluid from the five on-site transformers ranged from 46% in Transformer 2 to 52% in Transformer 1, as illustrated in Figures 5-1 through 5-4.

Analytical results of concrete chip samples collected by CTDEEP personnel adjacent to travel areas near the transformers and one travel area located on the east side of the main building indicated PCB concentrations ranging from 5.2 milligrams- per-kilogram (mg/Kg) near Transformer 1 to 78 mg/Kg near a travel area located on the east section of the main building. Several additional concrete chip and wipe samples were collected from various entrances and additional areas of concern. Concrete chip sample analysis indicated PCB concentrations ranging from non-detect (ND) collected from an area located at the northeast corner of the main building to 7,100 mg/Kg collected from an area in the vicinity of Transformer 5 within the electrical (transformer) room.

Wipe sample analysis indicated that PCB concentrations ranged from non-detect above the laboratory reporting limits (ND) collected from an area located in the northeast corner of the main building to 0.88 ppm collected from an area adjacent to Transformer 5 within the electrical (transformer) room. According to the spill report and associated inspector's report, approximately 2,527 gallons of PCB-containing transformer oil were removed from the five transformers. The five transformers were reported to have been removed in May 1999.

During the Phase III ESA, Marin performed an unbiased grid sampling of the top and bottom of the concrete slab, and soil immediately underlying the slab. PCB concentrations ranged from ND to 17,000 ppm.

The PCB impacts were observed on top of the concrete slab throughout the building interior. In general, the highest PCB concentrations were typically found adjacent to the former transformer locations. Most areas away from the former transformer locations were below 11 ppm. At several locations, PCBs were detected at the bottom of the concrete slab and soil immediately below.

Four monitoring wells were installed near the locations of the former transformers. No PCB-impacted groundwater was identified.

The Phase I and Phase II PCB Remediation Plans addressed both the former transformer source zones and residually contaminated entry-ways identified in the Marin Phase III ESA report.

AOC-8 - Dip Tank Area

An area containing a dip tank was located on the western interior section of the Tube Mill building (Figure 4-4). This dip tank consisted of a lifting mechanism on which parts were placed for cleaning. Piping from the dip tank ran through the concrete brick wall to the exterior.

Three samples were collected from this AOC during the Marin Phase III ESA. Two samples were collected from soils from immediately below the concrete floor in the dip tank area and one from the surficial soils on the exterior of the building immediately under the suspect piping.

Arsenic-impacted soils were identified suggesting a release from the dip tank. This AOC was addressed during the hazardous substances remediation in 2004.

AOC-9 - Southwest Potential Sludge Disposal Area

According to historic information (former Scovill Manufacturing/Century Brass employee interview by GZA) and historic aerial photographs, an area adjacent to the southwest corner of the Tube Mill building may have been used as a disposal area, possibly for sludge disposal. Nine test pits were installed in this area in 1988 by GZA; however no soil samples were collected for chemical analysis from this area. Various debris items (e.g., drums tops, metal straps, charred wood, glass, cinders, brick, etc) and an object which resembled a dried acid crystal were observed in one test pit.

Natural sand, silt and gravel deposits were observed in the remaining eight test pits. According to historic aerial photographs, a dirt pathway was observed, leading from the southwest area of the Tube Mill building to an area on the western section of the study site. A pile of unknown material was observed at the end of this dirt roadway.

During the RFI six soil borings were advanced in the vicinity of AOC-9 and no evidence of contamination by visual observation, field screening, or odors were detected in the subsurface borings.

This AOC was not investigated in any of the four phases addressed in this report.

AOC-10 - Boiler Room

A boiler room was located on the eastern side of the Tube Mill building. This room contained three boilers which were supplied with No. 6 heating oil. Reportedly, these boilers generated steam which was used to heat the Tube Mill building and provide

process water. The two southernmost boilers were installed with the initial construction of the facility in 1957. The northernmost boiler was added in the 1960's.

Various pits and trenches were observed adjacent to the boilers and a floor sump was observed on the northern section of the boiler room. Two floor drains were observed in each of the northern and southern sections of the boiler room. According to a GZA Environmental Site Assessment dated December 1988, the floor drains and sumps located in the boiler room floor discharged into the facility's storm drains and eventually to the Housatonic River.

A chemical storage area was observed on the northeastern section of the boiler room. This area contained wooden desks and shelves containing several labeled and unlabeled plastic and glass containers of various acids and reagents. Yellow staining and a small amount of caustic material were observed on the floor adjacent to the chemical storage area. An unidentified chemical odor was observed adjacent to this area. A stack was observed on the northern section of the boiler room. A pile of fibrous bricks was observed at the base of the stack.

Painted surfaces were heavily peeled throughout the boiler room area. Paint fragments were observed on the boiler room floor as well.

Based on previous sampling, the extent of contamination appears to be limited to the building footprint to a depth of 12-feet. The nature of the contamination suggests a waste petroleum-based cleaner or solvent, either released through the floor or from pipes running under the slab. This AOC was not addressed during any work-phase summarized in this report, as the EECA dated October 2004 suggests institutional controls be put in place to render the impacted sub-slab soils environmentally isolated.

AOC-11 - Floor Drain and Storm Water Drainage System

The site contains between 15 and 20 floor drains, catch basins, storm water outfalls, and manholes. These structures are located both on the exterior and interior of the Tube Mill building. The system drains to the West Aspetuck River through two outfalls and to the Housatonic River through one outfall.

Samples collected during the RFI in 2003 contained detections of metals (lead, mercury, chromium, copper, nickel, zinc, and barium), ETPH, and PCBs.

AOC-12 - Northwest Area of Stressed Vegetation

An area of stressed or no vegetation was located to the northwest of the Tube Mill building. The condition of the vegetation may be the result of a release or of prolonged boat storage.

This AOC was sampled as presented in the approved Tighe & Bond July 2003 Resource Conservation Recovery Act (RCRA) Facility Investigation Report. The sample results did not indicate that a release had occurred.

AOC-13 - Northeast Area of Stressed Vegetation

An area of stressed or no vegetation was located adjacent to the northeast of the Tube Mill building (Figure 4-5). The condition of the vegetation may be the result of a release or of prolonged boat storage.

This AOC was remediated in the hazardous substance remediation phase in 2004.

AOC-14 - Former Drum Storage Area

According to the GZA ESA dated 1988, an area of stained soil approximately eight feet by four feet was observed adjacent to three 55-gallon drums located on the northeast side of the Tube Mill building. A sample was collected and screened for VOCs. A response of 1 ppm was observed on the organic vapor analyzer (OVA). During the Marin Phase I site inspection, evidence of staining or past releases were not observed in this area.

AOC-15 - Container Storage Area 1

Sampling and remediation of Container Storage Area 1 within the Tube Mill building was part of a CTDEEP-lead RCRA closure plan for the site. No concrete chip, soil, or groundwater samples were collected from this Container Storage Area during the Marin Phase III ESA or in any remedial phase addressed in this report.

AOC-16 - Container Storage Area 2

Sampling and remediation of Container Storage Area 2 within the Tube Mill building was part of a CTDEEP-lead RCRA closure plan for the site. No concrete chip, soil, or groundwater samples were collected from this Container Storage Area during the Marin Phase III ESA or in any remedial phase addressed in this report.

AOC-17 - Laboratory Container Storage Area

A laboratory, formerly used to test tubing for imperfections or overstressing of tubing, was located on the eastern side of the Tube Mill building. During the Marin Phase I, these rooms were empty, but contained a number of work areas made up of sinks, desk space, and exhaust hoods. Cabinets, desks and shelves in the laboratory were noted to be empty. One large plastic container of blue liquid was observed in the northeast corner of the central laboratory room. No unusual floor staining or odors were observed in this area.

Reportedly, a storage area, formerly used to store a mercuric-nitrate solution, was located in the laboratory. During the Marin Phase I site inspection; a laboratory storage area was not observed.

No contaminants were identified in the soils or concrete of this AOC during the Marin Phase III investigation. The lack of detection of contamination in the AOC suggests a historic release has not occurred.

AOC-18 - Scrap Metal Storage Area

A scrap-metal storage area was observed in the southwestern exterior of the wood shop area. This area was contained within a chain link fence and was not accessible due to a locked gate. The scrap metal storage area was observed to be empty, except for a few areas which contained pieces of steel piping, heating, and ventilation system. Two rusty ASTs of unknown capacity were observed on the ground within the scrap metal storage area and appeared empty. Based on the historic GZA Environmental Site Assessment dated December 1988, two areas of oil staining were observed adjacent to the storage area.

A sample was collected from the area and screened using the Hewlett Packard-Gas Chromatograph (HP-GC). No identifiable hydrocarbons were observed in the sample.

One 275-gallon AST was observed to the south of the scrap metal storage area. A placard identifying the tank as containing flammable liquid was present on the side of

the tank. No unusual staining or odors were observed adjacent to the scrap metal storage area.

During the Marin Phase III ESA, no ETPH was detected in the soils, suggesting that a historic release has not occurred.

AOC-19 - Former Farmland

Landscaped areas and vacant land were observed adjacent to the north, south, east and west of the Tube Mill building. According to historic aerial photographs, the site was used as farmland prior to its development in approximately 1957. A large field is located adjacent to the west of the Tube Mill building and was historically used as farmland.

During the Marin Phase III ESA, four soil samples were collected from the former farmland. No contaminants (pesticides or herbicides) were detected in those samples.

AOC-20 - Pickling Pit 1

According to *Scovill Manufacturing Tube Mill Part Plumbing Plans Sections 1-3* dated June 1957, Pickling Pit 1 was located centrally along the eastern interior wall of the former manufacturing area of the Tube Mill building. This area could not be directly observed during the Marin Phase I site inspection as the pit was capped with concrete.

During the Marin Phase III ESA, a contaminant (ETPH) was identified in the concrete but not detected in the underlying soils. This suggests a historic release has not occurred.

AOC-21 - Pickling Pit 2

According to *Scovill Manufacturing Tube Mill Part Plumbing Plans Sections 1-3* dated June 1957, Pickling Pit 2 was located centrally along the northern interior wall of the former manufacturing area of the Tube Mill building. This area could not be directly observed during the Marin Phase I site inspection as the pit was capped with concrete.

During the Marin Phase III ESA, no contaminants were identified in the concrete or soils. This suggests a historic release has not occurred. This suggests a historic release has not occurred.

AOC-22 - Pickling Pit 3

According to *Scovill Manufacturing Tube Mill Part Plumbing Plans Sections 1-3* dated June 1957, Pickling Pit 3 was located on the central section of the former manufacturing area of the Tube Mill building. This area could not be directly observed during the Marin Phase I site inspection as the pit was capped with concrete.

During the Marin Phase III ESA, contaminants (low levels of PCBs, volatile organic compounds (VOCs) and metals) were identified in the concrete but not detected in the underlying soils. This suggests a historic release has not occurred.

AOC-23 - Pickling Pit 4

According to *Scovill Manufacturing Tube Mill Part Plumbing Plans Sections 1-3* dated June 1957, Pickling Pit 4 was located on the south-central section of the former manufacturing area of the Tube Mill building. This area could not be directly observed during the Marin Phase I site inspection as the pit was capped with concrete.

During the Marin Phase III ESA, two concrete chip samples and two subsurface soil samples were collected from pickling pit 4. No contaminants were detected above applicable CTDEEP regulatory criteria.

2.3 Geology & Surficial Materials

The Site is located in an area underlain by bedrock, identified as the Sweetheart Mountain Member of the Collinsville Formation, according to the Generalized Bedrock Geologic Map of Connecticut. This formation is described as consisting of gray to silvery, coarse-grained, poorly layered schist.

Surficial materials at the site are sand, gravel, and till. Sand and Gravels are composed of individual and sometimes altering layers of sand and gravel of varying types of sorting. Till is mainly defined as loose to moderately compact, generally sandy and commonly stony material.

2.4 Groundwater & Surface Water Classifications

Groundwater beneath the site is classified as GB by the CTDEEP. Groundwater with a GB Classification designates highly urbanized areas or areas of intense industrial activity and where public water supply is available. This water may not be suitable for direct human consumption due to waste discharges, chemical spills or leaks, or land-use impacts. CTDEEP's goal is to prevent further degradation of water quality by preventing additional discharges that would cause irreversible contamination.

Groundwater surrounding the site is classified as GA by the CTDEEP. Groundwater with a GA Classification designates areas of influence of private and potential public wells. This water is presumed suitable for direct human consumption without the need for treatment. CTDEEP's goal is to maintain the drinking water quality standards.

As previously mentioned, an east-west oriented groundwater divide is present beneath the former metal hydroxide lagoons. Groundwater south of the lagoons flows south-southeast towards the Housatonic River whereas groundwater north of the lagoon flows north- northeast towards the West Aspetuck River.

The Housatonic River, located approximately 1,000 feet south of the site, is classified as D/B by the CTDEEP. Class D/B surface waters are known to presently not meet Water Quality Criteria or not support one or more assigned designated uses due to severe pollution. The goal for such waters may be Class A or Class B.

The West Aspetuck River abutting the site to the north has an A Classification by the CTDEEP. Class A surface waters are known or presumed to meet Water Quality Criteria, which support designated uses.

Based on the CTDEEP's Aquifer Protection Maps, revised July 31, 2014, the site is located within an Aquifer Protection Area (APA). The APA's are designated around the state's active well fields and in sand and gravel aquifers that serve more than 1000 people. Land use regulations are established in those areas to minimize the potential for contamination of the well field. The regulations restrict development of certain new land use activities that use, store, handle or dispose of hazardous materials and require existing regulated land uses to register and follow best management practices.

Section 3
Remedial Activities Summary

The remedial activities discussed below occurred between May 2004 and December 2009.The activities were separated into four phases: petroleum impacts, hazardous substances, Phase I PCB source removal, and Phase II PCB remediation. Of the 23 initial AOCs identified in the CSM, nine AOCs were addressed in the four remedial phases. The AOCs addressed include: AOC-1: 1,000-gallon UST, AOC-3: 30,000-gallon USTs, AOC-5: Equalization Lagoon / Clariflocculator, AOC-6: Northwest Sludge Disposal Area, AOC-7: Interior Transformer Release Areas, AOC-8: Former Dip Tank, AOC-10: Boiler Room, AOC-11: Floor and Stormwater Drainage, and AOC-13: Northeast Area of Stressed Vegetation.

All waste manifests associated with the four remedial phases are summarized in Table 2.

Photographs from various stages of the four phases are depicted in Appendix C.

Laboratory analytical data for the samples discussed below are submitted in Appendix E.

3.1 Petroleum Impact Remediation

The petroleum impact remediation was conducted in AOCs 1 and 3. The work was overseen by Tighe & Bond and conducted by Manafort Brothers, Inc (Manafort) of Plainville, Connecticut. The work was conducted in accordance with the *CTDEEP UST Closure regulations*, and the *Remediation of Petroleum Impacts Specifications*, dated December 2003. The work included the removal of liquids/sludge from two 30,000-gallon No. 6 oil USTs, the demolition and removal of associated concrete structures surrounding the USTs (vaults, pads), the stock-piling, sampling and disposal of impacted soil. The work was conducted between May 26, 2004 and June 14, 2004. All analytical results are discussed in Section 5.

3.1.1 AOC-1: 1,000-gallon UST Closure

The 1,000-gallon gasoline UST was located by the southwestern side of the Site building (Figure 3-1). Prior to removal, an attempt was made to remove any remaining liquids/sludge from the UST; however, it was observed that the UST had been filled with concrete. The tank was removed and inspected. It was observed to be in good condition, with no visible holes. No signs of impact were observed on the soil within the tank-grave. Six post-excavation samples were collected, the locations shown on Figure 3-1. The tank was cut open, the concrete was removed and stock-piled, and the tank was, cleaned, crushed, and disposed of off-site.

3.1.2 AOC-3: (2) 30,000-gallon UST Closure, Transfer Vault, Piping

Two 30,000-gallon No. 6 oil USTs were located by the eastern side of the building (Figure 3-2). Approximately 27,512 gallons of product/water mixture were removed using a vacuum truck. Upon removal of the southern UST, the tank was observed to contain small (~⅛" to ¼") holes throughout the bottom of the UST. Impacted soils and concrete were observed at the bottom of the former southern tank-grave. Based on field observations, impacted soil and concrete were removed from the tank-grave and stock-piled with previously identified petroleum impacted material. Soil samples were collected from the post-excavation extents on the sidewalls and the bottoms. Sample locations are shown on Figure 3-2. The No. 6 oil USTs were cleaned, cut open, crushed, and disposed of off-site.

The transfer vault was located to the southeast of the southern 30,000-gallon No. 6 oil UST 3-2. The vault area was excavated to 15-feet below grade and the concrete removed and stockpiled. The soil observed beneath the concrete transfer vault was not visibly impacted. The feed-piping connected to the northern and southern USTs were contained inside concrete trenches. Upon removal of the concrete trench, visibly impacted soil was observed. Upon removal of the tanks, concrete, and impacted soil, the extents of the excavation were sampled, as shown on Figure 3-2.

Approximately 832-tons of petroleum impacted soil and concrete were removed from the UST and piping areas and disposed of off-site at Ted Ondrick Company (Ondrick), in Chicopee, MA.

The tank-graves were back-filled and compacted to grade using a mixture of visibly clean soils from the excavation and additional clean fill provided by the Town of New Milford.

3.1.3 Manifested Waste

Eight shipments of "combustible liquid – No. 6 fuel oil" were removed from the Site following the Petroleum Impact remediation. The liquid was disposed of at Safety Kleen Systems, Marlboro, MA. The total volume of liquid removed from the site was 30,112-gallons.

One shipment of 1.5-pounds of petroleum impacted PPE was disposed of at General Chemical Corporation in Framingham, MA.

832-tons of impacted soils were shipped to Ted Ondrick Company in Chicopee, MA.

3.2 Hazardous Substance Remediation

The hazardous substance remediation was conducted at AOCs 5, 6, 8, and 13. The work was overseen by Tighe & Bond and completed by Concord Construction (Concord) of South Kent, Connecticut. The work was conducted in accordance with *QAPP* dated March 2003, *Remediation of Hazardous Substances Specifications*, dated December 2003, and the *EECA (Building Exterior)*, dated June 2004. The work included the removal of sludge and liquids from the equalization lagoon, removal of acid-line piping associated with the lagoon, excavation of impacted soil, concrete demolition and removal, and post-excavation soil sampling. The work was conducted between August 3 and December 2, 2004.

3.2.1 AOC 5: Equalization Lagoon, Clariflocculator, & Acid Lines

The equalization lagoon was part of the former waste-water treatment process (Figure 4-2). It was approximately 80-feet wide by 132-feet long and at the time of the remedial activity, contained approximately 283,000-gallons of liquid. The liquid in the lagoon was sampled and determined to be the result of rainwater which accumulated in the lagoon. The water was discharged to the sanitary sewer under a CTDEEP discharge permit with the permission of the Town of New Milford Water Pollution Control Authority (WPCA). Concord discharged the water between August 11 and September 14, 2004. The lagoon liner was subsequently removed. Upon removal of the liner, several areas of impacted soil were observed and sampled.

The clariflocculator (clarifier) was located to the south of the equalization lagoon (Figure 4-1) and contained residual sludge at the center, which was removed and stock-piled on plastic. Based on laboratory analysis, the sludge was determined to be non-hazardous. The clarifier was demolished and the concrete base was removed. Five soil samples

were collected from beneath the concrete slab. One sample was taken from the concrete base. Based on the laboratory results, the excavated soil and demolished concrete base were removed as non-hazardous waste.

3.2.2 AOC 6: Northwest Sludge Disposal Area

The northwest sludge disposal area was located outside the northwest corner of the building (Figure 4-3). The soil was excavated on August 3, 4, and 6 of 2004 and stockpiled based on field observations. The green, impacted soil was segregated from the non-impacted soil in separate stockpiles. The extent of the excavation was increased as the green-stained soil extended into a nearby berm. Eight post-excavation samples were collected from the extents of AOC-6, as well as sixteen post-excavation samples collected from the extent of the additional "back area" which was the result of chasing the impacted soil extents to the terminus of contamination.

3.2.3 AOC 8: Former Dip Tank Area

The former dip tank was located on the eastern side of the central portion of the building (Figure 4-4). The excavation was conducted on August 6, 2004. An approximately 15-foot by 5-foot by 6-inches deep area of soil was removed and stockpiled for disposal. On September 2, 2004, three post-excavation samples were collected from the excavation sidewalls. The soil was excavated up to the building so there was no fourth sidewall to sample from. Based on the initial laboratory results, the excavation was extended on October 1, 2004. Three confirmatory samples were collected following the second round of excavation. Based on the second round of confirmatory samples, it was determined that the AOC had been sufficiently remediated to applicable CTDEEP criteria and no further excavation was needed.

3.2.4 AOC 13: Northeast Area of Stressed Vegetation

The northeast area of stressed vegetation was observed by the northeast exterior building wall (Figure 4-5). The AOC consisted of visibly impacted surficial material, described as "dark sludge". The initial excavation measured approximately 24-feet by 20-feet, to an unrecorded depth. Five post-excavation samples were collected on September 2, 2004. Based on the initial post-excavation sample results, it was determined that the AOC had been sufficiently remediated to applicable CTDEEP criteria and no further excavation was needed.

3.2.5 Manifested Waste

Seventy-seven truck-loads of "cover soil" were disposed of at WSI South Hadley Landfill, South Hadley, MA between October 11 and December 17, 2004. The total weight of non-hazardous cover soil removed from the site was 1,767.17 tons. Five truck-loads of "non-regulated contaminated soil" were shipped to Envirite of PA Modern Landfill, York, PA between December 11 and December 17, 2004. The total weight of non-regulated contaminated soil disposed of was 112.85 tons.

3.3 Phase I PCB Source Removal

The Phase I PCB remediation was conducted in AOCs 7 and 10. The work was completed between September 12, 2005 and August 23, 2006 in accordance with the EPA-approved Phase I PCB Source Removal Plan, dated March 2005. The Phase I PCB remediation was a result of the Phase III ESA data collected by Marin, dated December 2000. The work included interior asbestos remediation in the boiler room and adjacent offices, removal of mercury lamps and light ballasts, concrete and soil removal in the

four transformer areas, and two additional areas (B-4 and B-19) identified in the Marin Phase III ESA. The work was conducted by BesTech of Ellington, CT and overseen by Tighe & Bond.

3.3.1 AOC 7: Interior Transformer Release Areas

The Phase III ESA included two sample grids in an attempt to delineate PCB impacted materials related to the five transformers located in four areas of the building (T1 through T4/T4A, Figures 5-1 through 5-4), in addition, removal of concrete and soil in two other areas identified as B-4 and B-19 in the Marin Phase III ESA would be completed as well, Figures 5-5 and 5-6, respectively.

Beginning on October 3, 2005, the former transformer areas, B-4, and B-19 locations were marked for saw-cutting. Between October 30 and November 30, 2005 the PCB-impacted concrete was cut and removed from the areas. During the saw-cutting, the slurry water used to prevent the spread of concrete dust was collected and stored as PCB-waste.

Following the concrete removal, soil was excavated in each of the areas. Excavation activities were staggered to allow for confirmatory soil sample results to be processed by the laboratory. Based on several rounds of post-excavation samples, soil removal occurred in T-1, T-2, and T-3 areas until August 2006. In August 2006, BesTech began backfilling the excavated areas and completed the areas to grade with a concrete cap. The thickness of the concrete cap was not documented.

3.3.2 AOC 10: Boiler Room

During the Marin Phase III ESA, soils impacted with extractable total petroleum hydrocarbons (ETPH) and other volatile organic compounds (VOCs) were detected beneath the boiler slab. Based on the analytical results, the extent of contamination was limited to the building footprint and approximately 12-feet below the slab. It was determined during Phase I PCB remediation that the soils were already in an environmentally isolated environment and should be left as such.

However, if in the course of future site activities the building is demolished or the slab replaced, remedial action would need to be taken to address the ETPH and VOC impacts beneath the boiler room.

3.3.3 Manifested Waste

During the course of the Phase I PCB removal, several waste-streams were generated:

- Nineteen shipments classified as less-than 50 parts-per-million (ppm) PCB porous-material (concrete and soil) were generated, totaling approximately 136-tons. The less-than 50 ppm porous PCB solid-waste was disposed of at High Acres Landfill in Fairport, NY.

- Thirty-one shipments of PCB concrete and soil solid-waste, greater-than 50 ppm, totaling approximately 433-tons, were disposed of at CWM Chemical Services, LLC, Model City, NY.

- Sixteen shipments of various liquids were disposed of at Chemtron Corporation, Avon, OH. The liquids included, but were not limited to the following: acids, motor oil, waste paint, and other combustible liquids. Approximately 5,000-gallons of assorted waste-liquids were disposed of off-site.

- Twelve shipments of co-mingled less-than 50 ppm PCB waste and friable asbestos containing material (ACM) were disposed of at CWM Chemical Services, LLC, Model City, NY. The co-mingled waste totaled approximately 86-tons.

- One shipment of co-mingled greater-than 50 ppm PCB waste and friable ACM was disposed of at CWM Chemical Services, LLC, Model City, NY. The shipment weighed 10.47-tons.

3.4 Phase II PCB Remediation

The Phase II PCB remediation took place between October 2007 and January 2009, in accordance with the *EECA (Building Interior)* dated October 2004, *Phase II PCB Remediation Plan* dated December 2006, *PCB Cleanup and Disposal Approval* letter dated January 24, 2007, and the *Modification to March 16 2005 Phase I PCB Disposal Approval* letter, dated February 2007. The work was overseen by Tighe & Bond and conducted by TMC Environmental (TMC) out of Durham, CT. The work included the removal of PCB contaminated soils and concrete at four building entryways (associated with AOC-7), removal of porous/non-porous materials within the building including but not limited to the following: overhead cranes, miscellaneous household item, and the demolition of the former wastewater treatment plant and excavation of impacted soil beneath the footprint (AOC-4). The Town requested of the EPA the removal of AOC-11 (Floor drains and associated drainage lines) from the approved Phase II PCB Remediation Plan. AOC-11 was determined to contain PCB impacted materials; however, at the time of the plan implementation the Town lacked the funding to complete that work. EPA granted the addendum (Modification to March 16 2005 Phase I PCB Disposal approval letter) to the initial work plan and it was decided that AOC-11 would be addressed at a later date.

3.4.1 AOC 7: Entryways (Related to Transformer Release Areas)

During the Marin Phase III ESA and RFI, 108 samples were collected from the four building entryways (E-1 through E-4 and areas B-4 and B-19) shown on Figures 6-1 through 6-6. The entryways were excavated between November 2007 and February 2008. The excavation work alternated between the four areas to allow for confirmatory sample results to be received, and excavation extents increased as appropriate. Following the excavation, the areas were backfilled with clean fill and compacted to grade.

3.4.2 Decontamination and Removal of Non-Porous Materials

Wipe samples previously collected from several non-porous structures indicated surface contamination was present. Structures included overhead cranes, interior dumpsters, building columns, motorized pavement rollers, and a wheel-mounted crane with a tractor trailer body. Following the decontamination of the objects, wipe samples were collected in accordance with TSCA 761.312(b). Wipe results indicate that the majority of the non-porous structures were decontaminated to the point where disposal was possible. The only exceptions to that were the overhead cranes still mounted to the ceiling. The decontamination was unsuccessful due to difficulty in accessing to the suspended cranes.

It was stated in the remedial plan the Town would attempt to decontaminate if financially feasible. If the Town was unable, the complete decontamination would be left for a later date.

3.4.3 AOC 4: Demolition of Former WWTP and Removal of Underlying Soils

The former wastewater treatment plant was located in the vicinity of the former equalization lagoon (AOC-5) and former clarifier, as shown on Figure 4-1. Prior to the demolition of the former wastewater treatment building, TMC removed asbestos containing (AC) flashing from the sides of the building. Following the removal of the AC flashing, the concrete slab was removed. Soil was excavated from below the former slab footprint to the groundwater table, which was encountered approximately 17 to 18 feet-below-grade. Post-excavation confirmatory samples were collected from the sidewalls and base of the excavation. The excavation was then back-filled with clean fill and compacted to grade.

3.4.4 Manifested Waste

Between November 2007 and January 2009, 173 shipments of manifested waste were removed from the Site. One of the 173 shipments was 200-gallons of liquid waste, disposed of as greater-than 50 ppm PCB waste at TCI of Alabama LLC, Pell City, AL in accordance with CFR 761.60.

The remainder of the waste shipments was solid waste described here as follows:

- Seven shipments of PCB contaminated construction debris (concrete, asphalt, and soil) were disposed of at CWM Chemical Services, LLC in Model City, NY.
- Thirteen shipments of non-regulated soils for landfills were disposed of at WM Turnkey Landfill in Rochester, NH.
- Twenty-nine shipments of regulated soil were disposed of at Worcester Landfill in Worcester, MA.
- Eighteen shipments of alternative daily cover (ADC) contaminated soil were disposed of in the South Hadley Landfill in South Hadley, MA.
- Fifteen shipments of excavation related waste were disposed of at Casella Waste Services Southbridge Landfill in Southbridge, MA.
- Two shipments of greater than 50 ppm PCB contaminated waste were disposed of at TCI of Alabama, LLC in Pell City, AL.
- Two shipments of PCB-contaminated solid waste were disposed of at Chemical Waste Management, Inc. in Emelle, AL.
- One shipment of PCB-contaminated solid waste was disposed of at Veolia ES Technical Solutions in Port Arthur, TX.
- One shipment of non-friable asbestos waste (from the WWTP flashing) was disposed of at the Minerva Landfill in Waynesburg, OH.
- Eighty-five shipments of borrow / screened sand were disposed of by O & G Construction.

3.5 Asbestos Abatement

The ACM throughout the interior of the site building was included as part of the Phase I PCB Remediation Plan. The work was conducted in accordance with the Alternative Work Practice (AWP) for Century Brass, approved by the Connecticut Department of

Public Health (CTDPH) on June 6, 2005. An AWP was requested for the Site due to the wide-spread nature of the PCB and asbestos contamination, in part, caused by the deterioration of the roof leading to wind and rain infiltration.

The abatement was conducted by BesTech, the abatement monitoring was conducted by EnviroScience Consultants of Newington, CT and the final inspection and confirmation was provided by Tighe and Bond. The areas where the ACM was removed included: the boiler room, locker room and associated bathroom, the on-site hospital, two laboratory rooms, machine shop, main office and associated bathroom, mechanical room, wood shop, transformer room, manufacturing area, and associated manufacturing offices.

The work was conducted between September 2005 and November 2005. Following the abatement activities, a licensed Connecticut asbestos inspector completed final walk-throughs of the abated areas and conducted confirmatory air sampling. Based on the visual observations and analytical results, the areas were deemed successfully abated. The final asbestos observation documents are presented in Appendix D.

3.5.1 Manifested Waste

Eleven shipments of manifested waste were disposed at CWM Chemical Services, LLC, Model City, NY as a result of the asbestos abatement activities. Ten of the shipments, totaling 86 tons, were disposed of as ACM in combination with less-than 50 ppm PCB waste. One shipment contained greater-than 50 ppm PCBs.

Section 4
Regulatory Programs

The regulatory status of the site is complex, as environmental closure must satisfy requirements for various regulations under both State and Federal programs. The regulatory programs include the Resource Conservation and Recovery Act (RCRA), the Toxic Substances Control Act (TSCA) and the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) at the federal level, and the Underground Storage Tank (UST) Program, Property Transfer Program, Voluntary Remediation, PCB Remediation, Hazardous Waste Regulation and Interior Asbestos Abatement at the state level.

The extent of remediation and associated costs are based on the assumption that the applicable cleanup criteria and overriding authority is the Connecticut Remediation Standard Regulations (RSRs). The RSRs are applicable to cleanup of soils and groundwater and not directly applicable to cleanup of building materials, interiors, or sediments. Cleanup standards for the building interiors are included under the Federal programs, RCRA for hazardous material storage areas and TSCA for PCBs, and the Connecticut Department of Public Health Department (CTDPH) standards for lead-based paint and asbestos abatement. RCRA does not have a specific standard for their cleanup; however, because the RSRs are health-risk based, it is assumed that the RSR criteria will be suitable for cleanup of a RCRA storage area. Specific criteria for the other regulatory programs will be adhered to for cleanup of the building interior.

4.1 Federal Regulatory Programs

The programs at the federal level include the RCRA, TSCA and the CERCLA programs.

4.1.1 Federal Regulatory Resource, Conservation and Recovery Act

The Site must meet requirements of RCRA because it was used for the treatment, storage and disposal (TSD) of hazardous waste as defined by Title 40 of the Code of Federal Regulations Part 261 (40 CFR Part 261). Under the RCRA program, the regulated units are defined as those areas in which hazardous waste was stored, treated or disposed. The RCRA regulated units at the site include the former lagoons (AOC-2), which were used to store sludge derived from the treatment of industrial wastewater, and two areas inside the building that were used to store hazardous waste.

Due to the TSD status and the existence of the lagoons prior to RCRA, the site was required to submit an interim-status permit application for a TSD facility in accordance with 40 CFR Parts 265 and 270. An interim-status permit application consists of two parts, Part A, which is simply a notification of the TSD status, and a Part B, all other information required by the permit application. The Part A Permit Application for the Site was submitted to the EPA on February 19, 1983. The Part B Permit Application for the Site was submitted to the EPA in March 1992.

Connecticut is a state that has authority from USEPA to issue permits under the base program activities per 40 CFR Part 271. Therefore, RCRA closure issues for the regulated or permitted units are administered by CTDEEP.

A contractor for the EPA performed an Environmental Indicator Evaluation of the Site on June 16, 1995. The evaluation concluded that based on a review of environmental monitoring, site operations and the facility environmental setting, the site cannot be

classified as a site where human exposures are controlled or where no control measures are necessary. The EPA has listed the site as a high priority RCRA Corrective Action Site.

The facility is under the RCRA corrective action program likely as a result of statistically significant determinations in TOC levels in ground water during the early 1980's. Under §3008(h) of RCRA, EPA can issue an administrative order or file a civil action whenever it determines on the basis of any information that there is or has been a release of hazardous waste to the environment at an interim status facility. At a fully permitted facility, under §3004(u) of RCRA, EPA can require, as part of the permit, corrective actions for all releases of hazardous waste or constituents from any Solid Waste Management Unit (SWMU). Unlike the base program for RCRA permitting, the US EPA retains authority for the Corrective Action Program (CAP) in Connecticut. Therefore, the site is regulated by the EPA under the RCRA Corrective Action Program as defined by 40 CFR 264.100.

The immediate goal of the RCRA CAP is to document that contamination, if any, is stabilized, in that the contamination is not migrating off-site and the on-site threat to human health is controlled. In 1999, the US EPA reassessed the stabilization criteria for an Environmental Indicator Evaluation. With data collected from this study, the stabilization criteria will be re-evaluated by the USACE. Should stabilization be documented, then cleanup of the SWMUs can proceed on a normal schedule. Should stabilization not be documented, then the Site will continue to be a high priority site with accelerated cleanup of the SWMUs. After stabilization is demonstrated, cleanup at the site must satisfy requirements of 40 CFR 264.100.

Typically, corrective actions performed under the RCRA CAP require submittal of a plan under 40 CFR 264.112. However, it is our understanding that EPA may allow the Town to perform corrective actions under a voluntary program, where a formal plan is not submitted but the owner does submit a schedule for cleanup/investigation, performs an adequate investigation/clean-up that adheres to the schedule and submits timely progress reports and a final report to EPA. If the investigation/cleanup procedures were consistent with EPA requirements, then EPA would approve of the corrective actions.

In general, releases of petroleum products are not included in RCRA but are regulated under the UST regulations. Similarly, substances that are regulated under TSCA are not regulated under RCRA. However, these programs often defer to the RCRA as the controlling program at a site undergoing RCRA CAP or the programs will coordinate their efforts with RCRA as long as the studies conducted under the RCRA CAP meet the requirements of the other programs.

4.1.2 Toxic Substance Control Act

TSCA regulates the manufacturing, use, distribution in commerce, and disposal of chemical substances meeting the definition of a toxic substance. The most notable chemical substances regulated under TSCA are asbestos, lead-based paint, chlorofluorohydrocarbons and polychlorinated biphenyls (PCBs). Generally, the abatement of lead-based paint and asbestos containing material are regulated under State programs if the materials are found on building interiors. The site is regulated under TSCA because of one or more of dielectric fluid containing PCBs at concentrations greater than 50 mg/Kg. Authority to regulate TSCA PCB program is retained by the EPA. The CTDEEP has a PCB program that works closely with the TSCA program.

In a letter dated March 16, 2005, the USEPA notified the Town that the application for alternative sampling under 40 CFR 761.61(c) and the self-implementing cleanup in

accordance with 40 CFR 761.61(a) had been approved for the Phase I PCB Source Removal Plan.

4.1.3 Comprehensive Environmental Response, Compensation and Liability Act

CERCLA is responsible for evaluating and rating sites with respect to posing a significant threat for uncontrolled releases to the environment and human health impacts. In addition, CERCLA can authorize EPA-sponsored emergency remediation measures if threats to human health and the environment pose a substantial risk. The site has undergone Discovery and Preliminary Assessment under the CERCLA program.

Based on results of the Preliminary Assessment, further investigations at the site were deferred to the RCRA program.

4.2 State Regulatory Programs

The programs regulated by the state include the UST, asbestos abatement and Property Transfer, Voluntary Remediation and Hazardous Waste programs.

4.2.1 Underground Storage Tank Program

The UST program regulates underground storage tank installation and closures, and releases of petroleum products from those tanks (Sections 22a-448 through 22a-454 of the Regulations of Connecticut State Agencies (RCSA)). Previous owners of the Site submitted notification of three USTs at the Site. The date of installation for the USTs on the notification is listed as April 1957. In response to a questionnaire from the UST program, the owners reported that one UST (1,000-gallon) was abandoned in place. However, the age of the remaining USTs exceeded 20 years and these tanks required removal and/or proper abandonment. Removal of the USTs and any remediation associated with a release of petroleum from the USTs will have to meet requirements of the UST Program as well as the RCRA Corrective Action Program.

Following the Petroleum Impacts Remediation phase, the site met the requirements of the UST program.

4.2.2 Asbestos Abatement Program

The Asbestos Abatement Program is administered by the Connecticut Department of Public Health (CTDPH). Asbestos containing materials (ACM) have been identified within the building interior. The ACM requires proper abatement in accordance with Section 19A-332a of the RCSA.

A CT licensed inspector reviewed the abatement areas and determined both visually and analytically that the asbestos was successfully abated.

4.2.3 Property Transfer Program

The Property Transfer Program is a mechanism imposed by CTDEEP to determine responsibility for cleanup of properties that meet the definition of an Establishment during a transfer of ownership of such properties (Sections 22a-134a through 22a-134d). The site meets the definition of an Establishment and thus is regulated under the Property Transfer Program.

The program requires a party to certify that a release did not occur, or if a release did occur, the certifying party will take responsibility for remediation according to the applicable cleanup criteria. The applicable cleanup criteria for an Establishment are

listed in the Remediation Standard Regulations (RSRs), Sections 22a- 133k-1 through 22a-133k-3 of the RCSA.

The property was transferred from Century Brass Products, Inc. of Waterbury, Connecticut, to Davko, Inc. of Ridgefield, Connecticut, in 1988. In accordance with the Property Transfer Program, a Form III, which is filed for an Establishment at which a release to the environment has occurred and remediation is required or the extent of contamination has not been adequately delineated, was filed on September 22, 1988.

Davko was the certifying party. The Town of New Milford acquired the property due to a tax delinquency foreclosure in 1999. A transfer of ownership due to such a foreclosure is exempt from the Property Transfer Program. However, should the ownership be transferred from the Town to another party, the Property Transfer Program would require submittal of a Form III with a certifying party.

4.2.4 Voluntary Remediation Program

The purpose of entering the Voluntary Remediation Program is to expedite the cleanup of a property. Such a cleanup would facilitate the transfer or redevelopment of a property that meets the definition of an Establishment.

The State of Connecticut has two voluntary remediation programs defined by Connecticut General Statutes (CGS) 22a-133x or CGS 22a-133y. The program under CGS 22a-133x is applicable to Establishments as defined by CGS 22a-134 among other eligibility requirements. This program is the Voluntary Remediation Program under which the Town of New Milford has elected to pursue for the site. The program under CGS 22a-133y is applicable to properties located in an area with a GB or GC Groundwater Classification.

Although the CEC property is located in a GB Groundwater Classification area, the latter program is not preferred because of the outstanding order issued to the former owners, the surrounding GA areas, and the fact that the site is a High Priority RCRA Corrective Action Site.

Based on the CTDEEP's Aquifer Protection Maps, revised July 31, 2014, the site is located within an Aquifer Protection Area (APA). The APA's are designated around the state's active well fields and in sand and gravel aquifers that serve more than 1000 people. Land use regulations are established in those areas to minimize the potential for contamination of the well field. The regulations restrict development of certain new land use activities that use, store, handle or dispose of hazardous materials and requires existing regulated land uses to register and follow best management practices.

The Voluntary Remediation Program under CGS 22a-133x requires a submittal of an Environmental Condition Assessment Form (ECAF) documenting the existing conditions to CTDEEP. The ECAF for CEC was submitted on July 29, 2002.

Based on the ECAF, CTDEEP makes a decision whether the remediation will be overseen by CTDEEP staff or delegated to a Licensed Environmental Professional (LEP), pursuant to CGS 22a-133v. The CTDEEP notified the Town that the remediation at the CEC was delegated to an LEP in a letter dated August 29, 2002.

Under the program, the Town must submit a schedule for investigation and remediation. The remediation must be performed pursuant to requirements of the Connecticut Remediation Standard Regulations (RSRs) CGS 22a 133k(1) through (3). The requirements include remediating the site to specific numerical criteria for contaminants and public notice.

4.2.5 Hazardous Waste Program

Connecticut is a state that has authority from EPA to issue permits under the base RCRA program activities per 40 CFR Part 271. Therefore, RCRA closure issues for the regulated or permitted units are administered by the CTDEEP. Typically, the final closure and post-closure care plans are included for the regulated units in a RCRA TSD interim-status permit application. Due to the complex history of the site, a closure plan prepared by GZA GeoEnvironmental, Inc. was submitted separately to CTDEEP in September 1987. The closure plan was approved by the CTDEEP in August 1987. The closure plan documented procedures for "clean closure" of the regulated units as permitted by 40 CFR 265.228(a)(1) or 40 CFR 264.228(a)(1).

Clean closure includes the removal of all sludge and impacted environmental media. The CTDEEP has already overseen the closure of the lagoons. The funding for closure of the lagoons is from a letter of credit set forth in Consent Order HM-533. Presently, under the closure plan, the hazardous waste and impacted soils have been removed and disposed of off-site. The remediation of soils was shown to meet the closure criteria as well as the applicable remediation criteria of Connecticut.

The closure has not been completed because of several items that remain outstanding. The remaining items include decontamination of each of several container storage areas inside the building.

The site has an outstanding order from the CTDEEP related to the regulated unit closure. The order, Consent Order HW-533, was issued between Davko and CTDEEP. The order required Davko to close the regulated units and establish financial assurance in the form of a letter of credit. Upon closure of the regulated units, the order will also be closed.

On September 10, 2002, CTDEEP adopted revisions to the Hazardous Waste Regulations. One change was the addition of Section 22a-449(c)-105(h) of the Regulations of State Agencies (RCSA) relating to the cleanup of hazardous waste land disposal facilities. This regulation requires submittal of an ECAF (unless one was recently submitted) and CTDEEP determines whether or not remediation is required.

If remediation is required, CTDEEP determines if it will be overseen by the CTDEEP or an LEP (similar to the Voluntary Remediation Program under CGS 22a-133x). Unlike the Voluntary Remediation Program, this regulation imposes a two-year deadline for completion of an investigation and a three-year initiation of remedial actions. All other requirements of the Connecticut RSRs, including public notice, are applicable.

CTDEEP added Section 22a-110(a)(2)(RR) of the RCSA to the Hazardous Waste Regulations. This section allows facilities that were subject to Section 22a-105(h) to terminate interim status upon completion of remediation. This decision will be made by the CTDEEP Commissioner after a specified period for public comment.

4.3 State Soil Remediation Criteria

The CTDEEP soil remediation criteria integrate two risk-based goals: (1) Direct Exposure Criteria (DEC) to protect human health and the environment from risks associated with direct exposure to contaminated soil; and (2) Pollutant Mobility Criteria (PMC) to protect groundwater quality from contaminants that migrate or leach from the soil to groundwater. Soils to which both criteria apply must be remediated to a level which is equal to the more stringent criteria.

4.3.1 Direct Exposure Criteria

Specific numeric exposure criteria for a broad range of contaminants in soil have been established by the CTDEEP, based on exposure assumptions relative to incidental ingestions of contaminants in soils.

The DEC applies to accessible soil to a depth of 15 feet. The DEC for substances other than PCBs does not apply to inaccessible soil at a release area provided that, if such inaccessible soil is less than 15 feet below the ground surface, an environmental land-use restriction (ELUR) is in effect with respect to the subject release area. For PCBs, a maximum concentration of 10 milligrams per kilogram (mg/Kg) can remain in soils considered inaccessible. Inaccessible soil generally means polluted soil which is one of the following:

- More than four feet below the ground surface
- More than two feet below a paved surface comprised of a minimum of three inches of bituminous concrete or concrete
- Beneath an existing building
- Beneath another permanent structure(s) approved by the CTDEEP Commissioner. Buildings can be constructed and/or clean fill can be placed over contaminated soils rendering them inaccessible

CTDEEP has established two sets of DEC using exposure assumptions appropriate for residential land use (RES DEC) or for industrial and certain commercial land use (I/C DEC). In general, all sites are required to be remediated to the residential criteria. If the industrial/commercial land use criteria are applicable and used, an ELUR notification is required in accordance with the RSRs.

4.3.2 Pollutant Mobility Criteria

The PMC that will apply to remediation of a site depends on the groundwater classification of the site. The purpose of these criteria is to prevent any contamination to groundwater in GA classified areas, and to prevent unacceptable further degradation to groundwater in GB classified areas. The PMC generally apply to all soil in the unsaturated zone, from the ground surface to the seasonal low water table in GA classified areas. For GB classified areas, the PMC are applicable to all soils from ground surface to the seasonal high water table.

The criteria do not apply to environmentally isolated soils that are polluted with substances other than VOCs provided that an ELUR is recorded for the release area which ensures that such soils will not be exposed (unless approved in writing by the CTDEP Commissioner). Environmentally isolated soils are defined as certain contaminated soils beneath an existing building and which are above the seasonal high water table and not a source of ongoing contamination. An ELUR must be recorded for the site which ensures that such soils will not be exposed as a result of demolition of the building or other activities. Buildings can be constructed over contaminated soils rendering them environmentally isolated.

Soil remediation based upon the listed PMC requires that a substance, other than an inorganic substance or PCB be remediated to at least that concentration at which the results of a mass analysis of soil for such substances does not exceed the PMC applicable to the local groundwater classification (i.e., GA or GB). An inorganic substance or PCB in soil must be remediated to at least that concentration at which the

analytical results of leachate produced from either the TCLP or the SPLP analysis does not exceed the PMC applicable to the local groundwater classification.

The site has a CTDEEP Groundwater Classification of GB. A GB Classification means that the water quality has been or is presumed to have been impacted by prior land uses, spills or other activities and is not suitable for human consumption without treatment. Designated uses for groundwater with a GB Classification include industrial process water. Due to the GB Classification, the required PMC soil clean-up standard is the GB PMC. However, all previous remediation summarized in this report met the GA PMC standards.

Section 5
Remedial Activity Results

Analytical results reported in this IRAR were compared to remediation criteria listed in the CTDEEP Remediation Standard Regulations (RSRs) (January 1996, Amended June 2013). CTDEEP's intent in developing the RSRs was to define the following:

- Minimum remediation performance standards
- Specific numeric clean-up criteria
- A process for establishing alternative site-specific standards, if warranted

5.1 Petroleum Impact Remediation

5.1.1 AOC-1: 1,000-gallon UST Closure

Following the removal of the 1,000-gallon gasoline UST, six post-excavation samples were collected. One sample was collected from each side-wall, one sample was collected from the base of the excavation, and one sample was collected from the soil under the former feed-line for the gasoline pump. The sample locations are shown on Figure 3-1. All six post-excavation samples were non-detect for volatile organic compounds (VOCs) and synthetic precipitation leaching procedure (SPLP) lead, and therefore below CTDEEP regulatory criteria. The data is summarized in Table 3-1.

5.1.2 AOC-3: Transfer Vault, Piping, (2) 30,000-gallon UST Closure

Following the removal of the two 30,000-gallon USTs, vault, and associated piping from AOC-3, twenty-one post-excavation samples were collected. The sample locations are shown on Figure 3-2. The sample results are summarized as follows (Table 3-2):

Southern UST (seven total samples):

- Seven samples were analyzed for ETPH. Three contained detections (S1, B1, B2). The highest detection of ETPH was S1, which was 12 milligrams-per-kilogram (mg/Kg). This is below applicable CTDEEP regulatory criteria.
- The two base samples (B1, B2) were analyzed for VOCs. Sample B1 contained no detections of VOCs. Sample B2 contained a detection of methyl-tert butyl-ether (MTBE) at 0.016 mg/Kg. This was below applicable CTDEEP regulatory criteria.
- The two base samples were also analyzed for semi-volatile organic compounds (SVOCs). Neither sample contained detections of SVOCs.

Northern UST (seven total samples):

- Seven samples were analyzed from ETPH. Two samples, E2 and B1, contained detections of ETPH at 4.5 and 9.4 mg/Kg, respectively. Both detections were below CTDEEP applicable regulatory criteria.

- The two base samples were analyzed for VOCs. Sample B2 contained a detection of 0.0042 mg/Kg MTBE, which is below applicable CTDEEP regulatory criteria. Sample B1 did not contain a detection of any VOC.

- The two base samples were analyzed for SVOCs. Neither sample contained a detection of SVOCs.

Vault & Feed Piping (Seven total samples):

- Five samples were collected from the extents of the vault grave. One sample was collected from each sidewall and one from the base. All five samples were analyzed for ETPH. Two of the samples, N1 and W1, contained detections of ETPH at 7.4 and 9 mg/Kg, respectively. Both detections were below applicable CTDEEP RSR criteria.

- One sample, Vault-B1, was analyzed for VOCs and SVOCs. Sample Vault-B1 did not contain detections of either constituent.

- Two samples were collected from the feed lines and analyzed for ETPH. Both samples contained detections, 13 and 19mg/Kg, respectively. These detections are below applicable CT DEEP regulatory criteria.

5.2 Hazardous Substance Remediation

5.2.1 AOC 5: Lagoon Piping Trenches & Acid Line Removal

Sixteen soil samples and one concrete sample were collected following the removal of the lagoon liner, clarifier, and associated acid lines. Sample locations are shown on Figure 4-2.

Ten samples were taken from eight locations beneath the lagoon liner and were analyzed for total metals; three of those samples were analyzed for SPLP metals. The results indicated that the majority of the samples contained low-levels of total barium, copper, nickel, chromium, and lead. None of the total metals detected were in exceedance of CTDEEP regulatory criteria. The results of the SPLP analysis indicated levels of leachable chromium, copper, and lead in two of the three samples. The two detections of leachable chromium were in exceedance of the GA PMC of 0.05 milligrams-per-liter (mg/L) and were reanalyzed. Following the reanalysis, the results were below CTDEEP regulatory criteria. One sample was collected from a manhole adjacent to the lagoon, Lag-9. This sample also contained low-level detections of barium, cadmium, chromium, copper, lead, and zinc below any applicable RSR criteria.

Five soil samples and one concrete sample were collected from beneath the clarifier, as shown in Figure 4-2. All six samples were analyzed for total metals. The five soil samples analyzed for total metals contained low level detections of arsenic, barium, chromium, copper, lead, nickel, and zinc. None of the total metals detected in the five soil samples exceeded CTDEEP regulatory criteria. Two of the five soil samples were analyzed for SPLP metals (Clar-1, Clar-3). The two samples analyzed for SPLP metals contained detections of barium, copper, and mercury. No detection of SPLP metals exceeded CTDEEP regulatory criteria.

The analytical data is summarized in Table 4-2.

5.2.2 AOC 6: Northwest Sludge Disposal Area

Twenty-six post-excavation samples were collected from the excavation extents. The sample locations are depicted on Figure 4-3.

Ten soil samples were collected from the initial excavation extent in August 2004, summarized in Table 4-3, Part 1 (The samples AOC6-SW-1a and AOC6-SW1 were sampled in October 2004). The ten samples were analyzed for ETPH, total metals, VOCs, SVOCs, and PCBs:

- Low-level detections of ETPH were found in AOC6-SW6, AOC6-BOT1, and AOC6-BOT2 at 25, 110, and 110 mg/Kg, respectively. All ETPH detections were below applicable CTDEEP regulatory criteria.
- One total copper exceedance was found in AOC6-SW1 (August 2004 sample). Total copper was detected at 3,200 mg/Kg, which was in exceedance of the RES DEC level of 2,500 mg/Kg. The follow-up sample for this side wall, taken on October 1, 2004 contained a detection of copper at 3,500 mg/Kg. Following additional excavation, on October 18, 2004 the final AOC6-SW1 (exact location not documented) was collected and contained a detection of copper below CT DEEP regulatory criteria.
- Of the initial eight soil samples collected, four were analyzed for SPLP metals. Low levels of barium, copper, lead, chromium, and zinc were detected in three of the four samples. None of the SPLP detections were in exceedance of CTDEEP regulatory criteria.
- No detections of VOCs, SVOCs, or PCBs were found in the initial eight samples.

The excavation was extended to "chase out" a visibly contaminated layer. Sixteen additional soil samples were collected in September 2004 to verify successful removal of the contaminated layer (BA-1 through BA-16) summarized in Table 4-3 Part 2.

All of the samples were analyzed for total metals, four of the samples (BA-8,9,12,15) were analyzed for SPLP metals, eight of the samples were analyzed for PCBs (BA-1,3,5,7,9,11,13). Low level detections of total metals were found in all the samples. Low level detections of SPLP arsenic, barium, chromium, and copper were found in three of the four analyzed for SPLP metals. No PCBs were detected in the eight samples. No constituent detected in any of the sixteen "BA" samples exceeded CTDEEP regulatory criteria.

The analytical results are summarized in Table 4-3, Parts 1 and 2.

5.2.3 AOC 8: Dip Tank Post-Excavation Sampling

Nine samples were collected from three locations in AOC-8, the former dip tank area. The sample locations are depicted on Figure 4-4. Three samples were collected on September 2, 2004 and analyzed for total arsenic. Three additional samples were collected on September 16, 2004 and analyzed for PCBs. On October 1, 2004, three samples were collected following further excavation.

- Two of the three samples analyzed for total arsenic, exceeded the RES DEC criteria of 10 mg/Kg (AOC8-1 and AOC8-3). AOC8-2 contained a detection of 5.5 mg/Kg. Further excavation was conducted and three additional samples were collected on October 10, 2004 (1c, 2c, 3c). The samples collected on October 1, 2004 contained detections of arsenic below the RES DEC standard of 10 mg/Kg.

- All three samples collected on September 16, 2004 were analyzed for PCBs and contained concentrations less-than 1 mg/Kg. The samples collected on October 1, 2004 did not contain PCB detections above the laboratory reporting limits.
- The three samples collected on October 1, 2004 contained detections of arsenic below the RES DEC standard. These samples also did not contain detections of PCBs above the laboratory reporting limit.

The analytical results are summarized in Table 4-4.

5.2.4 AOC 13: Northeast Area of Stressed Vegetation

Five post-excavation confirmatory samples were collected. One sample was collected from each sidewall and one from the bottom of the excavation. Sample locations are depicted on Figure 4-5.

All five samples were analyzed for ETPH. All five samples contained detections of ETPH ranging from 23 mg/Kg in AOC13-5 to 430 mg/Kg in AOC13-3. None of the detections exceeded CTDEEP regulatory criteria.

The summary of the analytical results can be found in Table 4-5.

5.3 Phase I PCB Remediation

5.3.1 AOC 7: Interior Transformer Release Areas

Per Phase I PCB Source Removal Plan and the EPA Approval letter, dated March 16, 2005 the soil cleanup standard for the soil in the Phase I remediation was 1.0 mg/Kg and the concrete cleanup standard was 10 mg/Kg. The cleanup standard for concrete was set at 10 mg/Kg as impact is wide-spread throughout the slab and either capping or demolition and disposal would have to occur as the final remedy to achieve closure under TSCA.

Transformer Area 1 (54 soil samples, 9 concrete samples):

Fifty-three confirmatory soil samples and nine confirmatory concrete samples were submitted for PCB analysis, locations shown on Figure 5-1. Twenty-four of the fifty-three confirmatory soil samples contained detections of PCBs. Two of the twenty-four detections exceeded 1.0 mg/Kg, T-1-SB-7(A) at 190 mg/Kg and T-1-SB-9(A) at 19 mg/Kg. Both samples were collected against the building footing and no further excavation could be completed.

Of the nine concrete sidewall samples collected, seven contained detections of PCBs. Of the seven concrete samples which contained detections of PCBs, none exceeded the concrete cleanup standard of 10 mg/Kg.

Analytical data is summarized in Table 5-1.

Transformer Area 2 (58 soil samples, 10 concrete samples):

Fifty-eight confirmatory soil samples and ten confirmatory concrete samples were submitted for PCB analysis, locations shown on Figure 5-2. Twenty-nine of the fifty-eight soil samples contained detections of PCBs. None of the detections in the confirmatory soil samples exceeded 1.0 mg/Kg.

Of the ten confirmatory concrete samples collected, one contained a detection of PCBs. The detection did not exceed 1.0 mg/Kg.

The analytical data is summarized in Table 5-2.

Transformer Area 3 (14 soil samples, 5 concrete samples):

Fourteen confirmatory soil samples and five confirmatory concrete samples were submitted for PCB analysis, locations shown on Figure 5-3. Six of the fourteen soil samples contained detections of PCBs. One of the six detections was in exceedance of 1.0 mg/Kg, T-3-SB-1-SW-3 at 1.1 mg/Kg.

Three of the five concrete samples contained detections of PCBs. None of the detections were in exceedance of 10 mg/Kg.

The analytical data is summarized in Table 5-3.

Transformer Area 4 & 4A (4: 5 soil, 5 concrete, 4A: 3 soil, 3 concrete):

Five confirmatory soil samples and five confirmatory concrete samples were submitted for PCB analysis for transformer area 4. Three confirmatory soil samples and three confirmatory concrete samples were submitted for PCB analysis for transformer area 4A. The sample locations for transformer area 4 and 4A are shown on Figure 5-4.

Three of the five soil samples in transformer area 4 contained detections of PCBs. None of the detections were in exceedance of 1.0 mg/Kg. One of the five concrete samples in transformer area 4 contained a detection of PCBs but it was below 10 mg/Kg.

Two of the three soil samples in transformer area 4A contained detections of PCBs, neither detection was in exceedance of 1.0 mg/Kg. All three concrete samples collected from transformer area 4A were non-detect for PCBs.

The analytical data is summarized in Table 5-4.

B-4 Area & B-19 Area (B-4: 3 soil, 2 concrete, B-19: 4 soil, 2 concrete):

Three soil samples and two concrete samples were submitted for PCB analysis following the removal of soil in the B-4 area. None of the samples submitted contained detections of PCBs.

The sample locations are depicted on Figure 5-5. The analytical data is summarized in Table 5-5.

Four soil samples and two concrete samples were submitted for PCB analysis following the removal of soil in the B-19 area. Two of the four soil samples contained detections of PCBs, neither detection was in exceedance of 1.0 mg/Kg. Both concrete samples contained detections of PCBs, neither detection was in exceedance of 10 mg/Kg.

The sample locations are depicted on Figure 5-6. The analytical data is summarized in Table 5-6.

5.3.2 AOC 10: Boiler Room

The soil contamination identified in the Marin Phase III ESA was not addressed in any of the four remedial phases summarized in this report. It was deemed environmentally isolated and an Environmental Land Use Restriction (ELUR) was proposed to address the contamination left in place.

If the building was to be demolished or the slab disturbed in the area of AOC-10, the contamination would have to be addressed at that time.

5.4 Phase II PCB Remediation

Per the Phase II PCB Remediation Plan, dated December 2006 and the EPA approval letter, dated January 24, 2007 the soil cleanup standard for the soil in the Phase I remediation was 1.0 mg/Kg and the concrete cleanup standard was 10 mg/Kg.

An addendum to the Phase II PCB Remediation plan was requested and approved by the EPA to postpone the remediation of AOC 11, to allow the Town to acquire sufficient funds to successfully complete the work.

5.4.1 AOC 7: Entryways (Related to Transformer Release Areas)

The entryways to the building contaminated with residual PCBs associated with the transformer releases are located on Figures 6-1 through 6-4, identified as Excavation Areas: 1, 2, 3, and 4.

Excavation Area 1 (80 soil samples, 11 concrete samples):

Based on the initial confirmatory sample results, area 1 was excavated in two phases. The first was a 35-foot long by 13-foot wide rectangle identified as the "inside box", followed by an over-excavation by 14-feet long and 17-feet wide, "outside box". The inner and outer boxes are shown on Figure 6-1. Eighty post excavation soil samples were collected from the excavation extents (base and sidewall). Eleven confirmatory concrete samples were collected from the concrete slab of the building, outside the electrical room.

Fifty-three of the eighty soil samples contained detections of PCBs. Of the fifty-three detections, one samples was in exceedance of 1.0 mg/Kg, E1-OB-SW6 at 1.44 mg/Kg. Additional soil removal was conducted and the location as re-sampled. The second sample collected on February 12, 2008 did not contain PCB detections above laboratory reporting limits.

Nine of the eleven concrete samples contained detections of PCBs. Of the nine detections, one was in exceedance of 10.0 mg/Kg, C7. Additional concrete was removed and C7A was sampled on January 9, 2008. It contained a PCB detection of 4.2 mg/Kg, below the 10 mg/Kg cleanup standard.

The analytical data is summarized in Table 6-1.

Excavation Area 2 (10 soil, 3 concrete):

Ten confirmatory soil samples and three confirmatory concrete samples were submitted for PCB analysis. Sample locations are shown on Figure 6-2. Five of the ten soil samples contained detections of PCBs, none of the detections were in exceedance of 1.0 mg/Kg.

None of the concrete samples contained detections of PCBs.

The analytical data is summarized in Table 6-2.

Excavation Area 3 (12 soil, 4 concrete):

Twelve confirmatory soil samples and four confirmatory concrete samples were submitted for PCB analysis. Sample locations are shown on Figure 6-3. Nine of the twelve soil samples contained detections of PCBs, none of the detections were in exceedance of 1.0 mg/Kg.

One of the four concrete samples contained a detection of PCBs, it was not in exceedance of 10 mg/Kg.

The analytical data is summarized in Table 6-3.

Excavation Area 4 (33 soil, 9 concrete):

Thirty-three confirmatory soil samples and nine confirmatory concrete samples were submitted for PCB analysis. Sample locations are shown on Figure 6-4. Sixteen of the soil samples contained detections of PCBs, none of the detections were in exceedance of 1.0 mg/Kg.

Three of the nine concrete samples contained a detection of PCBs, they were not in exceedance of 10 mg/Kg.

The analytical data is summarized in Table 6-4.

5.4.2 Demolition of the WWTP and Remediation of the Underlying Soils

Twenty-three soil samples were collected from beneath the WWTP following the demolition and removal of the structure. The soil sample locations are depicted on Figure 4-1. Twenty-one of the twenty-three samples were analyzed for total metals (antimony, arsenic, barium, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, vanadium, zinc, and mercury). All twenty-one samples contained low-levels of various metals, consistent with naturally occurring background concentrations.

Eleven of the twenty-one samples were analyzed for SPLP metals. Low levels of leachable metals were detected in one sample. Thirteen of the twenty-one samples were analyzed for SVOCs. Five of the thirteen samples contained detections of SVOCs.

Two of the five samples exceeded CTDEEP RSR criteria. While awaiting analytical results, the sidewall containing the SVOC exceedances collapsed into the open excavation. During the stockpile load out, the material which comprised the sidewall containing the SVOC exceedances was loaded out with the original stockpiled soil.

There were no exceedances of CTDEEP RSR criteria for any detection of total or SPLP metals.

The analytical data is summarized in Table 4-1.

5.4.3 Decontamination of Non-Porous Materials

The decontamination of non-porous materials was attempted at the end of the Phase II PCB remediation. Several items which were easily accessible were decontaminated and wipe sampled to confirm surficial concentrations less-than 10 µg/cm². Confirmatory wipe sampling was conducted between October 2007 and March 2008, the results are summarized in Table 6-5 All non-porous items which were proposed to be decontaminated in the *Phase II PCB Remediation Plan*, dated December 2006, were successfully cleaned to below the criteria of 10 µg/cm² in accordance with TSCA 761.61(4)(iii). The exception was the two cranes which remained suspended in the southern portion of the building (Figure 6-5). The decontamination and removal of the cranes must be addressed at a later date.

Section 6
Summary

6.1 Summary

Tighe & Bond has prepared this Interim Remedial Action Report (IRAR) for the Century Enterprise Center (CEC), in New Milford, Connecticut (the site).

The purpose of this IRAR is to summarize the remedial activities conducted at the site between 2004 and 2009. The IRAR is also generated to support future applications for Environmental Protection Agency (EPA) Brownfields funding and to facilitate the redevelopment of the Brownfield site. A final RAR will be prepared once the site is completely remediated and verified by a Licensed Environmental Professional (LEP).

The work summarized in this report describes four phases of remediation that have already been completed and are outlined in the following documents:

1. **Remediation of Petroleum Impacts**
   Remediation of Petroleum Impacts Specifications, December 2003

2. **Remediation of Hazardous Substances**
   Quality Assurance Project Plan, March 2003
   Remediation of Hazardous Substances Specifications, December 2003
   Engineering Evaluation / Cost Analysis (Building Exterior), June 2004

3. **Phase I PCB Source Removal**
   Engineering Evaluation / Cost Analysis (Building Interior), October 2004
   Phase I PCB Source Removal Plan, December 2004
   PCB Disposal Approval Letter, March 16, 2005

4. **Phase II PCB Remediation**
   Engineering Evaluation / Cost Analysis (Building Interior), October 2004
   Phase II PCB Remediation Plan, December 2006
   PCB Cleanup and Disposal Approval Letter, January 24, 2007
   Modification to March 16, 2005 Phase I PCB Disposal Approval, February 2007

6.2 Petroleum Impact Remediation

The Petroleum Impacts Remediation Plan was intended to address the petroleum source areas associated with AOCs: 1 (1,000-gallon gasoline UST) and 3 (two 30,000-gallon No. 6 heating oil USTs). The remediation occurred between May 26 and June 24, 2004. The work was conducted by Manafort Brothers Construction of Plainville, CT and overseen by Tighe & Bond. Following the disposal of approximately 60,000-gallons of manifested liquid waste and approximately 832-tons of impacted soil, post-excavation sampling was conducted. Analytical results demonstrated successful remediation of soil in both AOC 1 and AOC 3. The areas were backfilled and compacted to grade.

Post-remedial groundwater monitoring is required for closure of these AOCs; however, it is not recommended that this be conducted until the building has been abated of PCBs and the CSAs closed.

6.3 Hazardous Substance Remediation

The Hazardous Substance Remediation Plan was intended to address the hazardous source zones in AOCs 5, 6, 8, and 13. The remediation occurred between August 3 and December 2, 2004. The work was conducted by Concord Construction of South Kent, CT and overseen by Tighe & Bond. Following the disposal of approximately 1,900-tons of manifested solid waste, post-excavation sampling was conducted. Analytical results demonstrated successful remediation of soil in all AOCs. No further remediation is required.

Post-remedial groundwater monitoring is required for closure of AOCs 5, 6, and 13; however, it is not recommended that this be conducted until the building has been abated of PCBs and the CSAs closed.

6.4 Phase I PCB Source Removal

The Phase I PCB Remediation Plan was intended to address the interior source zones of PCB contamination throughout the building. The remediation occurred between September 12, 2005 and August 23, 2006. The work-plan was submitted and approved by the EPA on March 16, 2005 under the authority of TSCA 15 U.S.C. 2605(e) and 40 CFR 761. The work was conducted by BesTech with monitoring by EnviroScience and oversight by Tighe & Bond. Following the disposal of approximately 5,500-tons of manifested solid waste and 6,500-gallons of manifested liquid waste, post-excavation sampling was conducted. Based on the analytical results, successful source-zone remediation of soil and concrete has been achieved in accordance with the EPA-approved self-implementing cleanup.

Based on the visual inspection of a CT-licensed asbestos inspector, and corresponding analytical data from air results, the abatement of the asbestos source zones was successful.

While the asbestos had been successfully abated from the areas addressed in the EECA (Interior) and the Phase I Source Removal plan, there remains ACM in the roof of the building. The remaining ACM, combined with the poor condition of the roof, remains a potential source of re-contamination of the building interior.

While PCB-hotspots were addressed in the Phase I Source Removal phase, the PCB contamination is wide-spread throughout the slab. Either capping or demolition and disposal would have to occur as a final remedy to achieve closure under TSCA.

Post-remedial monitoring is required for the source areas, additional soil and concrete removal may be required when the building slab is addressed.

6.5 Phase II PCB Remediation

The Phase II PCB Remediation Plan was intended to mitigate the residual PCB contamination created by the PCB source zones. The remediation occurred between October 2007 and March 2009. The work plan was submitted and approved by the EPA in a letter dated January 24, 2007 under the authority of 40 CFR 761.61.(a). The work was conducted by TMC of Durham, CT and overseen by Tighe & Bond. Following the disposal of approximately 3,000-tons of manifested solid waste, post-excavation sampling was conducted. Based on the analytical results, the six areas associated with PCB contamination were successfully remediated. The non-porous materials which were decontaminated by TMC were sufficiently cleaned to the standard in accordance with CFR 761.61(4)(iii) except for the two cranes which remain mounted in the ceiling.

Post-remedial groundwater monitoring is required for the excavation areas to achieve closure. Further decontamination of the crane is required prior to disposal. Neither action is recommended until the building has been abated of PCBs and the CSAs closed.

6.6 Remaining AOCs and Recognized Environmental Conditions (RECs)

Upon completion of the four phases of work summarized in this Interim Remedial Action Report, there remain the following AOCs which must be addressed before specific regulatory closure may be achieved:

- ***AOC 7 Interior Transformer Release Areas***
  While source hotspots of PCB contamination have been addressed, the concrete slab contains wide-spread PCB impacts and must be addressed through demolition and disposal or capping.

- ***AOC 11 Floor Drains and Stormwater Drainage System***
  The floor drains and stormwater drainage system drain to three outflows which discharge to areas adjacent to the Housatonic River and the West Aspectuck River. Extensive sampling has been conducted in the vicinity of the outflows, the drains and discharge system, as well as the swale and cove areas. PCBs and metals have been detected in exceedance of CTDEEP RSR criteria and ecological risk-based standards and must be addressed.

- ***Asbestos in Roofing***
  Hotspot asbestos removal has been conducted at ground-level in the interior of the building; however, asbestos containing material (ACM) remains in the roof. Due to the poor condition of the roof, this may have contributed to the re-contamination of the building interior with ACM.

- ***Groundwater monitoring***
  In order to successfully obtain closure from the CTDEEP, a demonstration of consecutive groundwater analysis below CTDEEP RSR criteria is required. The groundwater monitoring should not be initiated until all of the potential sources are remediated or abated.

EXHIBIT 2

MODIFIED SELF-IMPLEMENTING PHASE III PCB REMEDIATION PLAN

EPA ID: CTD000847707

Site Location

Century Enterprise Center
New Milford

Site Owner

Town of New Milford
New Milford, Connecticut

Certifying Party

TRC Environmental Corporation
Windsor, Connecticut

January 2015

MODIFIED SELF-IMPLEMENTING PHASE III PCB REMEDIATION PLAN

EPA ID: CTD000847707

Site Location

Century Enterprise Center
New Milford

Site Owner

Town of New Milford
New Milford, Connecticut

Certifying Party

TRC Environmental Corporation
Windsor, Connecticut

TRC Project No. 220697.00004
November 2014

TRC Environmental Corporation
21 Griffin Road North
Windsor, Connecticut 06095
Telephone 860-298-9692
Facsimile 860-298-6399

TABLE OF CONTENTS

SECTION			PAGE
1.0	INTRODUCTION		1
	1.1	Site Location and Description	1
	1.2	Purpose	1
	1.3	Historical Investigations and Remedial Actions	2
	1.4	Results of Recent PCB Building Materials (Caulk/Glaze Survey)	3
	1.5	Proposed Phase III PCB Remediation Scope of Work	4
	1.6	Potential Additional Phase III Work	5
	1.7	PCB Remediation Work Excluded from Phase III	6
2.0	REMEDIATION PROCEDURES		7
	2.1	General Demolition Project Scope/Sequence	7
	2.2	PCB-Impacted Soil Adjacent to the Building Exterior	8
	2.3	Abatement/Remediation of PCB Caulking/Glaze	8
	2.4	Remediation of PCB-Contaminated Overhead Cranes	8
	2.5	Remediation of PCB-Impacted Floor Slab	9
	2.6	Remediation of Sub-Slab Soil and Concrete Foundations	12
3.0	DOCUMENTATION		14
	3.1	Field Notes	14
	3.2	Photographs	14
	3.3	Survey	14
	3.4	Transport and Treatment/Disposal Certifications	15
	3.5	Report	15
	3.6	Recordkeeping	15

FIGURES

A Figure 1, Proposed Slab and Subslab PCB Remediation Areas and Sampling Locations
B Figure 2, Underground Utilities and Additional Subslab PCB Remediation Areas

1.0 INTRODUCTION

1.1 Site Location and Description

The Site is known as the Century Enterprise Center (CEC) and is located along Aspetuck Road in New Milford, Connecticut. Historically, the CEC has been referred to by other names, including the "Century Brass Facility", "Century Brass Tube Mill" or "Davko Site", depending on former usage. According to the Town of New Milford Tax Assessor's files, the Site is identified on Map 34/Blocks 40 and 41, and Map 35/Blocks 2, 4, and 5. The site access is obtained via a gate at the end of Scovill Street off Aspetuck Road. A substantial amount of site background and characterization information has previously been submitted in various reports, correspondence, and other documents, including the reports referenced in Section 1.3.

The Site is currently abandoned and is owned by the Town of New Milford (Town). Although certain structures have been demolished and/or removed from the site during previous demolition and remediation projects, the main mill building, nominally 40 feet high and having an overall footprint of approximately 320,000 square feet, still remains. The building is not considered suitable for reuse, is currently considered unsafe for structural reasons principally related to the roof, and has been designated for demolition.

1.2 Purpose

Demolition of the building, which will include certain abatement and remedial activities, is intended to move the Site closer to a beneficial reuse scenario using available funding sources. The Town is ultimately seeking to achieve unrestricted use status for the property. Based on site-specific documentation reviewed by TRC, a limit of 1 mg/kg PCBs in soil and concrete, if any, to remain on site will be appropriately protective to allow unrestricted use (assuming other contaminants besides PCBs are also adequately addressed).

TRC has been retained by the Town to provide certain environmental consulting and engineering services directed toward future site re-development. Accordingly, TRC has prepared this Modified Self-Implementing Plan (Plan) in support of Phase III PCB Remediation at the Site, which will be performed as part of the overall building demolition project. The nature of the proposed Phase III work is further described in various sections of this Plan. Consistent with the PCB remediation plans utilized for prior projects at the Site, the Plan is considered to be a modified SIP, due to the fact that the verification sampling frequency differs for the overall slab surface

differs from what is specified in 40 CFR 761. Contents of this Plan, once approved, will be incorporated into Bid Documents used to obtain public bids as needed for the demolition of the existing building, under a recent grant obtained in cooperation with the State of Connecticut Department of Economic and Community Development (CT DECD).

1.3 Historical Investigations and Remedial Actions

As the Site is regulated under both RCRA and TSCA programs, a number of associated, historical Site investigations and remedial actions have been performed and documented to date. The TSCA program exclusively regulates ongoing remediation of PCB containing building materials and equipment, as well as PCB impacts to the building floor slab and other structures. The impacts to the building floor slab have been primarily attributed to release(s) from transformers formerly installed at the Site. Due to tracking by movement of equipment during historical site operations, PCB impacts have been detected primarily, but not exclusively, in the upper 1-inch of most of the building slab, and in concrete and surficial soil at four different building entryways. The widespread PCB contamination in the building slab was previously characterized by Marin Environmental using a nominal 100-foot grid pattern for the main mill building footprint, and a nominal 10-foot grid pattern at select areas, including areas adjacent to former transformers, inside the electrical room, and outside building entryways (see **Figure 1**).

To date, two phases of PCB remediation activities have been performed, both under the supervision of Tighe & Bond of Middletown, Connecticut. Details regarding these Phase I and Phase II PCB remediation activities, along with certain other investigations and remedial actions, have previously been provided to the United States Environmental Protection Agency (EPA) in various documents, which include the following key reports and letters:

- Phase III Environmental Site Assessment (ESA), Marin Environmental (December 2000)
- RCRA Facility Investigation Report (RFI), Tighe & Bond (July 2003)
- Engineering Evaluation/Cost Analysis, Building Interior, Tighe & Bond (October 2004)
- Phase I PCB Source Removal Plan, Tighe & Bond (December 2004)
- PCB Disposal Approval Letter, EPA (March 16, 2005)
- Phase II PCB Remediation Plan, Tighe & Bond (December 2004)
- PCB Cleanup and Disposal Approval Letter, EPA (January 24, 2007)

- Modification to March 16, 2005 Phase II PCB Disposal Approval, Tighe & Bond (February 2007)
- Interim Remedial Action Report (IRAR), Tighe & Bond (September 2014)

As described in the applicable documents, Phase I PCB source removal activities, completed between 2005 and 2006, included removal of concrete and soil in former transformer areas, and other limited areas within the footprint of the building. Areas exhibiting PCB concentrations greater than 50 mg/kg were reportedly removed and disposed at a TSCA facility. In addition, the floor drain system adjacent to former Transformer No. 2 was reportedly removed in Phase I (according to Tighe & Bond's Phase II PCB Remediation Plan).

Phase II PCB remedial activities, completed between 2007 and 2009, included the removal of concrete and soil containing PCB concentrations greater than 1 mg/kg outside the building at building entryways, as well as the decontamination (as needed) and removal of certain PCB-contaminated porous/non-porous materials within the building (such as some previously dismantled overhead cranes which were on the floor of the building). Removal and disposal of remaining floor drains, associated piping and acid lines was originally planned for Phase II, but were de-scoped and deferred to a later phase of work.

1.4 Results of PCB Building Materials Inspection

Initial building surveys and sampling were performed in October 2014 to categorize interior and exterior caulks and glazings at the Site. The building survey was performed following techniques generally employed in the Building Sciences industry to identify, locate and sample homogeneous building materials (i.e. Asbestos Hazard Emergency Response Act [AHERA] asbestos sampling guidelines). Sampling methodology generally involved collecting three (3) grab samples per homogenous material type identified, when feasible, by completely removing the caulk and the glazing from the location and inspecting to determine if there were any other older/historical caulks/glazings present at the location. All caulks and glazings were determined to be original to construction. Samples were extracted and analyzed using EPA Methods 3540C and 8082, respectively, and all analytical results were reported on a dry weight basis.

Of the seventeen (17) building caulk and glazings sampled, all caulk and glazing samples were found to contain total PCB concentrations <50 ppm. Twelve (12) of these seventeen (17) types of building caulks and glazings sampled were determined to be Federally Excluded PCB/State

Regulated Products with in-situ total PCB concentrations >1 <50 ppm. The remaining five (5) types of caulk or glazings contained in-situ total PCB concentration <1 ppm and were determined to be Federally Excluded PCB Products/Non-Regulated PCB Products.

Subsequent to this sampling, additional investigations were performed to determine PCB concentrations within building materials (CMU, Concrete, Brick, Glazed Block & Transite) adjacent to areas with Federally Excluded PCB/State Regulated Products and to characterize the extent of impacts to soil or other surface cover materials that may have been affected by flaking or deteriorating Federally Excluded PCB/State Regulated Wastes. All porous substrate samples were found to contain PCB concentration <1 ppm. Of the exterior surface cover samples collected, five (5) were found to have a total PCB concentration >1 <50 ppm.

1.5 Proposed Phase III PCB Remediation Scope of Work

The primary objective of Phase III PCB remediation work will be to ensure that known PCB impacts within and above the concrete floor slab are addressed. Since the building is being demolished as part of this economic development project, it will be necessary to complete the abatement/remediation of the remaining PCB-containing materials attached to or within the building structure (i.e., above the floor) first. The known remaining PCB containing/impacted materials consist of PCB caulk/glaze identified in Section 1.4, as well as the final two remaining overhead cranes (previously shown to be PCB-impacted, based on wipe samples) that are supported on beams inside the building. These items will be addressed prior to building demolition activities or other disturbances.

Another critical aspect of the proposed Phase III PCB remediation work is to address widespread, surficial PCB contamination remaining in the existing building slab. As indicated in **Figure 1**, most of the nominally 6-inch to 8-inch thick floor slab in the mill building, and in the electrical room, contains PCBs exceeding 1 mg/kg in the upper 1-inch portion, and in some areas exceeding 10 mg/kg. Although comparatively small areas of the slab were removed as part of the Phase I PCB remediation, most of the documented contamination in the slab surface still remains. During the proposed Phase III remediation, the upper 1-inch portion (at a minimum, subject to verification sampling) of the contaminated slab areas will be milled off and disposed, followed by removal of limited sections of the slab in certain areas (see Section 2.5). Milling has been determined to be the most feasible and economical way of addressing the widespread, surficial

PCB impacts, whether or not the entire slab will ultimately be excavated. Solvent washing is not expected to be as effective in uniformly reducing PCB concentrations to below 1 mg/kg in the upper 1-inch portion of the entire slab based on the pilot tests conducted at the site.

It should be noted that, based on data contained in Tighe & Bond's IRAR, there remains one location on the floor slab where PCBs above 50 mg/kg (i.e., sample location T4-6 in the electrical room is shown to have 59 mg/kg PCBs.). Additionally, the data in the IRAR indicate that soil at certain locations adjacent to the building (i.e., outside the electrical room overhead door known as Exterior Bay Door 1, and outside the overhead door known as Exterior Bay Door 2, near floor slab sample location B-39) contain PCBs at concentrations greater than 1 mg/kg (inferred from composite sample analytical results). These areas will be removed and verified prior to demolition or milling, to ensure that further tracking or cross contamination does not occur.

Depending on whether the milled slab, and possibly the building foundations, are to be partially or fully removed as part of the overall demolition project (based on funding) certain sub-slab and foundation PCB remediation work may be incorporated into Phase III as described in Section 1.6, or else may be deferred to a later phase.

1.6 Potential Additional Phase III Work

As previously mentioned, certain additional sub-slab and foundation PCB remediation work may be performed as part of this project, or else may be deferred to a later phase, depending on the extent to which the slab and foundations are removed as part of this project.

If sufficient funding is available, the remaining floor drains, associated piping and acid lines, which are known to contain PCBs and other contaminants, will be removed and disposed offsite. The locations of floor drains and acid lines are shown on **Figure 2**.

Additionally, Phase I PCB remediation verification sample data in Tighe & Bond's IRAR indicate the presence of PCB's in subslab soil or concrete foundations at concentrations above 1 mg/kg (including one above 50 mg/kg) at a certain discrete or composite sample locations. These areas consist of subslab foundations at the former Transformer #1 area (as inferred from Tighe & Bond's IRAR), and subslab soils at the former Transformer #3 area.

These various remaining subslab PCB impacts may be remediated during Phase III (again depending on whether sufficient funding is available). Note that the former Transformer #1 area and Transformer #3 excavation were re-capped with concrete during Phase I PCB remediation

activities, along with the other transformer area excavations.

1.7 PCB Remediation Work Excluded from Phase III

It is expected that sub-slab soil and foundation PCB impacts which are not addressed as part of this project would be remediated in later phases.

Even if subslab soil and foundation impacts are completely addressed as part of this project, certain areas outside the building, including stormwater discharge piping and outfalls, one of which remain impacted with PCBs, have been designated to be part of a separate project, and are therefore not covered under this Plan.

Work-scope items that are deferred to future phases will be addressed in new and/or revised plans or submittals, as required.

2.0 REMEDIATION PROCEDURES

2.1 General Demolition Project Scope/Sequence

To provide context, the anticipated overall demolition project scope/sequence, including work not directly related to PCB remediation, is outlined below. The sections following the outline provide details regarding specific aspects of the planned PCB remediation activities. Except where specifically noted, associated characterization/delineation or confirmation/verification sampling grids will be established at the frequency specified in the regulations (i.e., 10-foot and 5-foot grids, respectively). Grids will be expanded horizontally and/or vertically, if required based on the results of sample analyses. Additional details will become available as part of the bidding process, based on the preparation of bid documents and solicitation of contractor work plans, etc.

1. Provide necessary regulatory notifications to the EPA and CTDEEP before proceeding
2. Address residual soil PCB contamination greater than 1 mg/kg at certain areas adjacent to the building exterior
3. Address previously identified floor slab contamination greater than 50 mg/kg not addressed during Phase I PCB remediation activities (one known location, which is inside the electrical room).
4. Perform abatement of remaining lead based paint, asbestos containing materials, and other hazardous/regulated materials with the exception of the roof.
5. Perform abatement/remediation of PCB-containing materials in the building (caulking/glaze and overhead cranes)
6. Demolish the building by "dropping" the roof and systematically removing the structural steel and cutting/removal of columns down to slab elevation.
7. Separate the steel for salvage and ship remaining building and roofing material for off site disposal
8. Mill applicable areas of floor slab (main mill building, plus additions on west side, and the electrical room) to remove widespread, surficial PCB contamination
9. Remove all, or selected portions of, the floor slab and foundations, while addressing subslab contamination of PCBs or other contaminants (as applicable)
10. If the slab will remain, cap sand-filled excavations, including those associated with former equipment supports/foundations (former drawbenches, etc.) as necessary to prevent infiltration
11. Perform final cutting and capping of utilities
12. Backfill and compact excavations (as applicable)
13. Perform final grading and site restoration (as applicable)
14. Compile and submit RAR (or interim RAR, if PCB impacts above 1 mg/kg are to remain for future phases)

2.2 PCB-Impacted Soil Adjacent to the Building Exterior

Available data indicate that the following two areas on the east side of the building contain soil containing PCBs above 1 mg/kg (based on the results of composite sample analyses which apparently were not evaluated for mass-averaging effects): outside the building at the entry to the former electrical room, and outside the building at the overhead door nearest concrete slab sample location B-39. At these two areas, the 5-foot verification sampling grid previously utilized during Phase II verification sampling (see Tighe & Bond's IRAR) will be re-established to re-evaluate the vertical limits of PCB-impacts in soil at the exceedance locations. No compositing of samples is proposed for these areas. Soil impacted above 1 mg/kg will be excavated and disposed offsite based on 'as is' concentrations, which are expected to be compatible with disposal at a non-TSCA facility. Pending collection and analysis of new verification samples (from the same grid) confirming that the area meets the 1 mg/kg limit, excavated areas will be backfilled and compacted with clean fill. PCB impacts apparently remaining in the adjacent foundation wall will either be addressed at the same time (by cutting out a section and then verifying) or else will be temporarily isolated with HDPE sheeting or other approved materials to avoid potential for cross-contamination of clean soil backfill materials pending foundation removal at a later stage.

2.3 Remediation of Federally Excluded PCB/State Regulated Waste

Remediation of State Regulated Wastes (Caulks, Glazings & Exterior Surface Cover) will be performed in accordance with CTDEEP PCB Statutes 22a-463 through 469 and the PCB Specification for this site.

2.4 Remediation of PCB-Contaminated Overhead Cranes

The two overhead cranes remaining in place reportedly contain surface concentrations greater than 10 ug/100 cm^2 on the surfaces. The oil and grease in the gearboxes of the cranes reportedly do not contain PCBs. The cranes will be removed and disposed offsite at a non-TSCA facility by a qualified contractor. Depending on dismantling/removal procedures proposed by the Contractor, as well as any disposal facility requirements, the cranes may first be decontaminated by a performance-based method (proposed by contractor) to reduce surface PCB concentrations, in accordance with 40 CFR 761.61(4)(iii). Following decontamination (if applicable) verification wipe samples will be collected in accordance with Subpart P. Compositing of wipe samples (if applicable) will be performed

in accordance with 761.312(b). After they have been decontaminated (if required), the cranes will be removed and disposed offsite.

2.5 Remediation of PCB-Impacted Floor Slab

Initially, the one area of the concrete floor slab still known to contain surficial PCB concentrations above 50 mg/kg will be addressed. It is expected that this degree of contamination does not extend deep into the slab, but this will be verified as part of this project. At a minimum, the upper inch of concrete assumed to exceed 50 mg/kg will be excavated by a performance-based method (proposed by the selected contractor). Appropriate measures will be utilized to prevent the spread of concrete dust, particularly during any cutting (e.g., collection and containerization of slurry water as PCB containing waste). Following the initial excavation, verification samples will be collected. Pending collection and analysis of verification samples (from the same grid) meeting the 50 mg/kg limit, excavated areas will be backfilled and compacted with clean fill and/or re-capped with concrete, as needed). The excavated, contaminated concrete will bplaced into a lined, covered container pending disposal. Excavated concrete from the vicinity of T4-6 will be handled and disposed of as PCB remediation waste > 50 mg/kg at a TSCA-permitted facility. Excavation and other equipment used for this and other PCB remediation tasks throughout the project will be decontaminated following the EPA-approved procedures previously used in other phases (double rinse/wash methods as defined in Subpart S).

Next, the widespread, surficial PCB impacts will be addressed by milling the upper inch of applicable areas of the floor slab. These areas consist of the main mill building (approximately 240,000 SF), the north mill extension (approximately 20,000 SF), the south mill extension (approximately 20,000 SF), the former lumber shop/box shop area (approximately 20,000 SF), and the electrical room (approximately 2,000 SF). Different types of milling equipment may be used in different areas, in order to facilitate milling at both the main finished floor elevation, and at the lower elevation of the comparatively narrow truck and rail car loading areas on the south end of the building. The Contractor will be directed to use equipment and methods that limit the generation and migration of dust particles, including the use of air mist as needed to meet the requirements of the approved air quality monitoring program for the project. Milling will be completed with the floor drains plugged, in order to further limit the migration of dust and dust control fluids into the floor drains and outfalls. Workers will be required to use suitable PPE

(respiratory and dermal protection) in accordance with an approved project Health and Safety Plan.

Milling of the floor will proceed systematically, in stages, based on a proposed verification sampling grid. In particular, the same verification grids originally proposed by Tighe & Bond in their Engineering Evaluation/Cost Analysis, Building Interior (i.e., the blue circles on **Figure 1**) will be utilized to direct milling operations, and to determine locations of verification samples. As shown on the figure, a 50-foot verification grid is proposed for all of the targeted areas, except for the electrical room, where a grid based on 10-foot spacing is proposed. Note, that Tighe & Bond's proposed 50-foot sampling grid will be extended/expanded into the north mill extension, in order to address known and expected residual impacts in that portion of the building floor slab. Millings will be placed into designated, lined, covered rolloff containers, and "stockpile" samples will be collected and analyzed as required by the approved disposal facility. The grid box(es) associated with the content of each rolloff will be tracked. The contents of a given rolloff will not be disposed until both the associated stockpile sample results, and the post-milling verification results, have been evaluated. Each verification sample will be a composite of 4 to 5 grid points from the 0 to 0.5-inch, post-milling depth, as previously proposed by Tighe & Bond. Milling will be continued to a greater depth at certain grids where composite-adjusted verification sample results are not less than 1 mg/kg. That is, where a verification sample is a composite of 4 distinct locations, for example, the concentrations of that verification sample will be compared to a remedial goal of 0.25 ppm. Any exceedances of this composite-adjusted endpoint would require additional milling (or other approved alternatives) in the vicinity.

Although milling of 1-inch (or more) is expected to remove the majority of the widespread surificial PCB contamination > 1 mg/kg in the applicable portions of the building floor slab, available information indicates that it may not be practical to achieve this targeted remedial endpoint throughout the slab footprint by milling alone. Information contained in Tighe & Bonds's IRAR indicates that the concrete in the underside of the slab still contains PCBs slightly above 1 mg/kg in some areas (i.e., at the limits of excavation at the former Transformer #1 area, and at the limits of excavation around sample B-19 in the north mill extension). More importantly, Tighe & Bonds' RFI report indicates that PCBs exceed 1 mg/kg (but are less than 50 mg/kg) throughout the full slab thickness in some (i.e., in the vicinity of samples B-35 through B-39) areas which appear to be in the general vicinity of former container storage areas. Available data suggest that such exceedances of the targeted 1 mg/kg endpoint do not extend into the underlying soil at

these locations. In any case, it does not appear that remediation plans specifically addressing any of these areas have previously been proposed by Tighe & Bond. Due to the overall slab thickness, the potential presence of rebar deeper in the slab, and other considerations, it is proposed to cut out/excavate applicable sections of the slab after milling the top inch.

Initial delineation/characterization (on 10-foot grids) is proposed in the vicinity of B-38 and B-39, prior to cutting out/excavating and verifying these areas, which appear to be relatively isolated and therefore potentially amenable to removal of small sections of the slab. In contrast, a nominally 40-foot wide swath of the slab along the entire western wall of the south mill extension/lumber shed (i.e., encompassing samples B-35 through B-37) would be removed without delineation, and then subjected to composite verification sampling in subslab soils, and along the edge of the remaining, intact concrete slab.

After slab milling and cutout operations have been completed, the milled surface will be left predominantly in the 'as is' roughened state. Sealing, capping, or other restoration of the milled slab as a whole is not proposed to be part of the Phase III activities. Additional slab demolition activities may be conducted as a separate work scope option, as funding allows. If the slab is designated to remain, only limited areas where slab cutouts currently exist (e.g., old equipment foundations previously removed) or were created by the aforementioned operations, will be capped with concrete, where necessary. If aforementioned portions of the slab known to contain PCBs > 1 mg/kg are not removed during Phase III, such areas will remain under restricted use (i.e., recording of deed restriction within 60 days) until such time as remediation is completed to the targeted 1 mg/kg limit. Based on available data, it is expected that PCB concentrations will be sufficiently low (i.e., less than 25 mg/kg) in the milled slab to allow designation as a low occupancy area, without the need to install a cap and/or fence. If this is not possible, then the affected areas will be surrounded by a fence and/or capped in accordance with the regulations and applicable guidance (in addition to the deed restriction).

Since the source areas with PCBs greater than 50 mg/kg will have been delineated, removed, and verified prior to milling, it is anticipated that most, if not all, of the millings will be disposed of as PCB remediation waste < 50 mg/kg at an approved, non-TSCA facility (subject to sampling and analysis of the millings, and verification sampling of the material left behind) This overall, proposed approach for the widespread floor slab impacts is consistent with the conceptual

model previously established by Tighe & Bond, and is expected to make beneficial reuse of the site more feasible.

2.6 Remediation of Sub-Slab Soil and Concrete Foundations

As previously discussed, subslab PCB contamination may be wholly or partially addressed during Phase III PCB remediation activities. Known areas containing residual PCB impacts exceeding 1 mg/kg, consist of:

- Floor drains, associated piping, and acid lines (see **Figure 2**),
- Subslab foundations at the limits of excavation at the former Transformer #1 area (based on discrete and composite verification samples, respectively, collected during Phase I), and
- Subslab soils at the former Transformer #3 area (based on a single discrete verification sample)

To the extent designated for Phase III PCB Remediation, the remaining floor drain structures, associated piping, and residual contents will be excavated and disposed of as PCB Remediation Waste > 50 mg/kg at a TSCA facility, as proposed in Tighe & Bond's Phase II PCB Remediation Plan. Acid lines and overlying concrete will be disposed of as PCB Remediation Waste < 50 mg/kg at a non-TCSA facility. After excavation of floor drains, verification soil samples will be collected on a 5-foot grid pattern from the base and walls of the excavations of the floor drains for the analysis of PCBs (and other parameters as needed to address RCRA program considerations). No compositing of associated verification samples is proposed. As proposed in Tighe & Bond's Phase II PCB Remediation Plan, if significant (i.e., greater than background) soil vapors are detected using a photo-ionization detector (PID) and/or field observations (e.g., visual, olfactory) indicate the presence of VOCs, samples will be analyzed for VOCs in addition to PCBs. For investigation purposes, soil samples will be collected at each pipe joint, and otherwise at maximum 25-foot intervals, along the runs of piping and acid lines, and submitted for the same analyses.

The floor drain system in the vicinity of Transformer #2 was reportedly removed during the nominal 1-foot deep excavation in the vicinity, which was conducted as part of Phase I PCB Remediation activities. No additional sampling from this area is proposed, as it is assumed that

Tighe & Bond determined that releases or exceedances were not evident at the depth of the removed drain and piping system. This area would only be revisited if data or information indicating otherwise becomes available. This may include observations made during field inspections.

Limited sections of subslab soil and foundations will be removed where the results of Phase I verification samples indicate PCBs exceed 1 mg/kg. New composite verification samples will be collected from the concrete at applicable locations and depths. It is expected that resulting data will indicate that some materials can be disposed as PCB remediation waste < 50 mg/kg, while others, particularly in the vicinity of former Transformer #1, will need to be disposed as PCB remediation waste > 50 mg/kg (based on 'as is' concentrations reported by Tighe & Bond).

Removal of the limited, known remaining areas of residual PCB impacts in this manner is intended to allow handling and/or disposal, or on-site crushing, of the remaining slab as C&D waste (assuming no other PCB impacts are identified, and any applicable RCRA program issues are addressed). It is anticipated that the foundations or portions thereof, will similarly either be crushed on site, or disposed of in the same manner. Since subslab soils were previously characterized by Marin Environmental on a 100-foot grid pattern, and known exceedances will have been addressed, no additional soil sampling and analysis for PCBs is proposed, even if the remediated slab is removed as part of this project. The former building slab footprint will likely either be finished with turf, paved, or otherwise stabilized or covered.

3.0 DOCUMENTATION

Documentation of the field activities will be performed on a daily basis by the contractor and TRC during the performance of the remediation, and will be summarized at the conclusion of the remediation in a Remedial Action Report (RAR) completed by TRC.

3.1 Field Notes

The field inspector will maintain a daily log of on-site activities. That log will include, but not be limited to the following:

- Daily health and safety meetings.
- Personnel and equipment on site.
- Field procedures and observations.
- Excavation progress and extents.
- Sample locations selection criteria, samples collected, analyses performed, sample handling.
- Telephone or other instructions.
- Equipment decontamination.
- Buried utility information.
- Concrete structure decontamination and testing.
- Waste transporter information.
- Backfill compaction testing.

3.2 Photographs

Daily photographs will be taken of representative activities, such as milling and excavation, sample locations, subsurface structures, and backfilling. The final extents of the excavations will also be photographed. Copies of selected photographs will be included in the RAR.

3.3 Survey

The horizontal extents of the excavations will be documented by survey, referenced to a suitable benchmark. Vertical extents will be measured from the surrounding ground surface where the use of survey rods and other survey equipment to determine depth is not practical. The RAR will include documentation of the extent and depth of the excavations.

3.4 Transport and Treatment/Disposal Certifications

Manifests and/or Bills of Lading for the transportation, treatment and disposal of waste materials and certifications of the treatment or disposal of the wastes, if necessary, will be obtained from the transporter and from the treatment/disposal facility. Copies of these forms will be included in the RAR.

3.5 Report

The RAR will be prepared by TRC upon receipt of all analytical data confirming that the removal action was complete and receipt of certifications of treatment/disposal from the treatment/disposal facility. The RAR will include the following.

- Site description
- A description of field procedures
- Verification sample locations and analytical results
- A photographic record of the excavations and backfilling
- Figures showing the extent of excavations, utilities, and restoration
- Waste characterization sample data
- Backfill material characterization sample data
- Backfill compaction testing data
- Waste transport and treatment disposal information
- Copies of waste manifests and bills of lading
- Post-excavation depths and mapping
- Description of any known remaining PCB impacts (in which case, the report becomes an interim RAR, or IRAR)

3.6 Recordkeeping

TRC will prepare and maintain all records and documents required by 40 CFR Part 761, including all those records required under Subpart K. The records shall be maintained in a centralized location for a minimum of three years and will be available for inspection by representatives of EPA if required.

FIGURES